

EAST COAST CHEMICAL  
DISPOSAL, INC.  
Levittown, Bucks County  
Pennsylvania

RCRA PERMIT APPLICATION  
for  
Hazardous Waste  
Part B.  
Storage and Treatment  
40 CFR Parts 122, 264 - thru 265

PAD 98 055 1162

Project No. 3100

January, 1982

Prepared By

Municipal Environmental Associates, Inc.  
908 Bethlehem Pike                      Finore Building  
Spring House,                              Pennsylvania

## PREFACE

East Coast Chemical Disposal, Inc. of Levittown, Bucks County, Pennsylvania is submitting this Application based on the Authority of Sections 1006, 2002(a), 3004 and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 and as amended by 42 U.S.C. 6905, 6912(a), 6924 and 6925.

Subtitle "C" of RCRA creates a "cradle-to-the-grave" management system assuring that hazardous waste is safely stored, treated or disposed.

East Coast Chemical Disposal, Inc. proposes to store and treat hazardous waste by complying with standards that "may be necessary to protect human health and the environment".

Standards are stated in Parts 260 thru 265 and parts 122 and 125.

East Coast Chemical Disposal, Inc. services many types of industry by collecting soiled solvents and spent chemicals for proper storage and treatment. Some of the soiled solvents are transported to a Resource Recovery Facility for conversion to a usable product.

Industries depend on the services of this firm for proper management of their soiled solvents and spent chemicals.

PART 122

EPA ADMINISTERED PERMIT PROGRAMS:

THE HAZARDOUS WASTE PERMIT PROGRAM

122.25(a) General Information Requirements

1. East Coast Chemical Disposal, Inc. will operate in a fully enclosed, 12,000 square foot facility. ECCD will transport hazardous waste in containers (drums) and by bulk (tankers) from generators of these wastes to its facility for storage, treatment and disposal.

At startup, soiled solvents will be transported to Resource Recovery Facilities for conversion to a usable product. Treatment of spent chemicals at this facility will be by neutralization and solidification by addition of acids, alkalines, fly ash, vermiculite, etc.

2. Chemical and Physical Analysis  
See Subpart B - 265.13.
3. Waste Analysis Plan  
See Subpart B - 265.13.
4. Description of Security Procedures  
See Subpart B - 265.14.
5. General Inspection Schedule  
See Subpart B - 265.15.
6. Request for Waivers  
N/A
7. Copy of Contingency Plan  
See Subpart D.
8. Description of Procedures, Structures or Equipment  
See Subpart C - 265.31, 265.32.
9. Precaution Descriptions  
See Subpart I - 265.176, 265.177, 265.198 and 265.199.
10. Traffic Pattern  
The purpose of the Facility Traffic Control Plan is to maintain a smooth flow of traffic throughout the facility. This will be achieved primarily by efficient layout of driveway and aisles, and secondly,

with adequate control signs posted in appropriate locations. Speed limit on the driveway and turn-around will be 5 mph.

Three (3) types of vehicles will be present at the facility: passenger cars, forklift trucks, truck tractors pulling tankers or vans.

Passenger cars will be used by employees and visitors and will park in front of the facility building - maximum of three (3) at any one time.

#### Forklift Trucks

Forklift trucks will be used to transport containers to and from storage areas - all within the enclosed facility (building).

At this time and in the foreseeable future, the estimated maximum number of complete trips the forklifts will make along the aisles will be 160 in sixteen (16) hours. One forklift truck will be sufficient.

#### Tankers and Vans

Since this is a relatively small operation, one tanker and one van are in use. Each will probably leave and return to the facility once each day. For the present time, tankers will accept soiled solvents from the generator and transport those solvents to a Resource Recovery Facility for conversion to a usable product. The van will transport containers from the generators to the facility for storage, treatment and disposal. Disposal will be to a certified disposal area.

At this facility, we will maintain aisle space to allow unobstructed movement of personnel with fire protection equipment to any area of the facility in an emergency.

Drum storage areas are the only location where hazardous waste will be stored in containers. Main aisles will be at least eight (8) feet wide and stacking aisles at least four (4) feet wide.

## II. Facility Location Information

(i) The geographic location of this facility is found at latitude 40°08'09" and longitude 74°50'18" in Bristol Township, Bucks County, Pennsylvania.

(ii) According to the Geological Map of Southeastern Pennsylvania, the geological survey of 1932

indicates that the nearest fault of record is approximately six (6) miles from the facility. There has been no recorded seismic action anywhere in Pennsylvania in Holocene times.

(iii) According to the Federal Insurance Administration, flood insurance rate map of September 29, 1978, this facility is not within the 100 year flood plain.

Note: Part II - Hazardous Waste Management System of General Requirements for Treatment, Storage and Disposal Facilities (4UCFR Part 264), as of January 12, 1981 has been completed as Part B of this application.

# Key

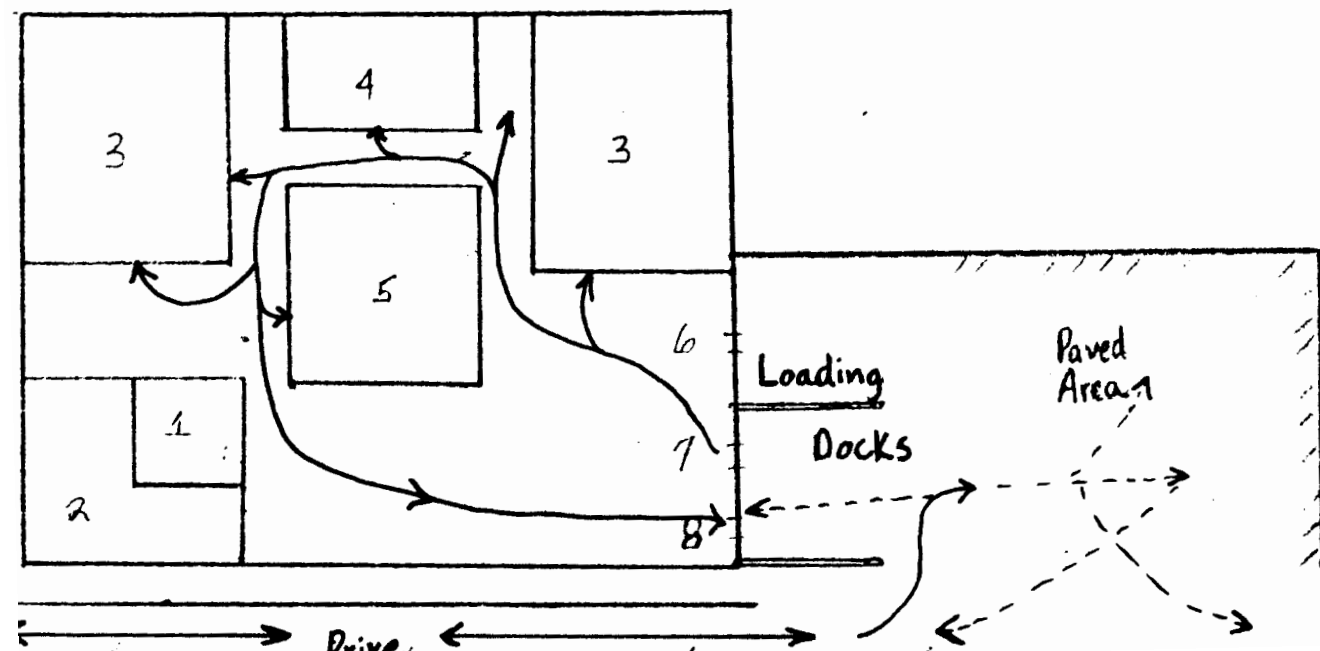
- |                                |                                    |
|--------------------------------|------------------------------------|
| 1 Laboratory                   | 6 Receiving - Materials + Supplies |
| 2 Office                       | 7 Receiving                        |
| 3 Container Storage            | 8 Shipping                         |
| 4 Materials - Tools - Supplies | x — x Fence                        |
| 5 Processing Area              |                                    |

Scale 1" = 400"

TRAFFIC CONTROL PLAN FOR  
MAJOR FACILITY VEHICLES  
AND INTERIOR MOVEMENTS

Property Line  
325'

141.3'



## TABLE OF CONTENTS

		<u>PAGE NO.</u>
I	Preface	
II	Subpart A - General	
	265.1 Purpose, Scope and Applicability	A-1
	265.4 Imminent Hazard Action	A-1
III	Subpart B - General Facility Standards	
	265.10 Applicability	B-1
	265.11 Identification Number	B-1
	265.12 Required Notices	B-1
	265.13 General Waste Analysis	B-1, B-4
	265.14 Security	B-4
	265.15 General Inspection Requirements	B-4
	265.16 Personnel Training	B-6, B-27 to B-54
	265.17 General Requirements for ignitable, reactive or incompatible wastes	B-7
IV	Subpart C - Preparedness and Prevention	
	265.30 Applicability	C-1
	265.31 Maintenance and Operation of Facility	C-1
	265.32 Required Equipment	C-1
	265.33 Testing and Maintenance of Equipment	C-1
	265.34 Access to Communications or Alarm System	C-2
	265.35 Required Aisle Space	C-2
	265.37 Arrangements with Local Authorities	C-2
V	Subpart D - Contingency Plan and Emergency Procedures	
	265.50 Applicability	D-1
	265.51 Purpose and Implementation of Contingency Plan	D-1
	265.52 Content of Contingency Plan	D-1
	265.53 Copies of Contingency Plan	D-7
	265.54 Amendment of Contingency Plan	D-7
	265.55 Emergency Coordinator	D-8
	265.56 Emergency Procedures	D-8
VI	Subpart E - Manifest System, Recordkeeping and Reporting	
	265.70 Applicability	E-1
	265.71 Use of Manifest System	E-1

## TABLE OF CONTENTS (cont.)

	<u>PAGE NO.</u>
265.72 Manifest Discrepancies	E-1
265.73 Operating Record	E-1, E-2, E-3
265.74 Availability, Retention and Disposition of Records	E-3, E-4
265.75 Annual Report	E-4, E-5
265.76 Unmanifested Waste Report	E-5
265.77 Additional Reports	E-5
 VII Subpart F - Ground Water Monitoring	
265.90 Non-Applicability	F-1
 VIII Subpart G - Closure and Post-Closure	
265.110 Applicability	G-1
265.111 Closure Performance Standard	G-1
265.112 Closure Plan	G-1
265.113 Time Allowed for Closure	G-2
265.114 Disposal or Decontamination of Equipment	G-2
265.115 Certificate of Closure	G-2
265.117 Post-Closure Care and Use of Property; Period of Care	G-2
265.118 Post-Closure Plan; Amendment of Plan	G-3
265.119 Notice to Local Land Authority	G-3
265.120 Notice in Deed of Property	G-3
 IX Subpart H - Financial Requirements	
265.140 Applicability	H-1
265.142 Cost Estimate for Facility Closure	H-1
265.143 Financial Assurances for Facility Closure	H-2
265.144 Cost Estimate for Post-Closure Monitoring and Maintenance	H-2
265.145 Financial Assurance for Post- Closure Monitoring and Maintenance	H-2
265.146 Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure	H-2
265.147 Legal Requirements	H-2
265.148 Incapacity of Institutions Issuing Letters of Credit, Surety Bonds or Insurance Policies	H-2
265.149 Applicability of State Financial Requirements	H-2



## TABLE OF CONTENTS (cont.)

		<u>PAGE NO.</u>
	265.150 State Assumption of Responsibility	H-3
	265.151 Wording of the Instruments	H-3
X	Subpart I - Use and Management of Containers	
	265.170 Applicability	I-1
	265.171 Condition of Containers	I-1
	265.172 Compatibility of Waste with Container	I-1
	265.173 Management of Containers	I-1
	265.174 Inspections	I-2
	265.176 Special Requirements for Ignitable or Reactive Wastes	I-3
	265.177 Special Requirements for Incompatible Wastes	I-3
XI	Subpart J - Tanks	
	265.190 Applicability	J-1
	265.192 General Operating Requirements	J-1
	265.193 Waste Analysis and Trial Tests	J-1
	265.194 Inspections	J-2
	265.197 Closure	J-3
	265.198 Special Requirements for Ignitable or Reactive Wastes	J-3
	265.199 Special Requirements for Incompatible Wastes	J-3, J-4
XII	Subpart K - Surface Impoundments	
	265.220 Non Applicability	K-1
XIII	Subpart L - Waste Piles	
	265.250 Non Applicability	L-1
XIV	Subpart M - Land Treatment	
	265.270 Non Applicability	M-1
XV	Subpart N - Landfills	
	265.300 Non Applicability	N-1
XVI	Subpart O - Incinerators	
	265.340 Non Applicability	O-1
XVII	Subpart P - Thermal Treatment	
	265.370 Non Applicability	P-1

## TABLE OF CONTENTS (cont.)

	<u>PAGE NO.</u>
XVIII Subpart Q - Chemical, Physical and Biological Treatment	
265.400 Applicability	Q-1
265.401 General Operating Requirements	Q-1
265.402 Waste Analysis and Trial Tests	Q-1
265.403 Inspections	Q-2
265.404 Closure	Q-2
265.405 Special Requirements for Ignitable or Reactive Wastes	Q-3
265.406 Special Requirements for Incompatible Wastes	Q-3
XIX Subpart R - Underground Injection	
265.430 Non Applicability	R-1

SUBPART A

GENERAL

265.1 Purpose, Scope and Applicability

East Coast Chemical Disposal, Inc. proposes to establish a facility located at 1971 Hartel Street, Levittown, Bristol Township, Bucks County, Pennsylvania for the purpose of storage, treatment and disposal of hazardous waste. Disposal will be off-site.

A genuine need exists for Hazardous Waste Management. ECCD will fulfill this need by collecting from generators, soiled solvents and spent chemicals, transporting these materials to their proposed facility for storage, treatment and disposal. Treatment will consist of neutralization and solidification. Some of the soiled solvents will be transported to a Resource Recovery Facility for conversion to a usable product. Treated materials will be transported to a certified facility for disposal. There will be no disposal at this facility. This facility is totally enclosed. Amendments to this Permit will occur from time to time.

Industries are dependent on the services of this firm and others to provide Hazardous Waste Management.

265.2 - 265.3 Reserved

265.4 Imminent Hazard Action

Notwithstanding any other provisions of the regulations, enforcement actions may be initiated pursuant to Section 7003 of RCRA.

SUBPART B

GENERAL FACILITY STANDARDS

265.10 Applicability

East Coast Chemical Disposal, Inc. will operate in a fully closed 12,000 square foot facility. ECCD will transport hazardous wastes in containers (drums) and by bulk (tanker) from generators of these wastes to it's facility for storage, treatment and disposal.

At startup, soiled solvents will be transported to a Resource Recovery Facility for conversion to a usable product. Treatment of spent chemicals at this facility will be by neutralization and solidification by addition of acids or alkaline, and fly ash and/or vermiculite, etc.

265.11 Identification Number

This application is for the purpose of securing an Identification Number.

265.12 Required Notices

- A. The operator of this facility will notify the Regional Administrator in writing at least four (4) weeks in advance of receiving hazardous wastes from a foreign source.
- B. Upon transferring ownership or operation of this facility during its operating life, the new owner or operator will be notified in writing of the requirements of this Part and Part 122 of this Chapter.

265.13 General Waste Analysis

The general types of hazardous wastes which East Coast Chemical Disposal, Inc. is handling or will handle are (using the EPA hazardous waste number):

- F001 The spent halogenated solvents used in degreasing and other applications, tetrachlorethylene, trichlorethylene, methylene chloride, 1,1,1, trichloroethane, carbon tetrachloride, and the chlorinated fluorocarbons; and sludges from the recovery of these solvents.
- F002 The spent halogenated solvents, tetrachloroethylene, methylene chloride, trichlorethylene, 1,1,1, trichloroethane, chlorobenzene, 1,1,2 trichloro 1,2,2 trifluoromethane and the still bottoms from the recovery of these solvents.

- F003 The spent non-halogenated solvents, xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, n-butyl alcohol, cyclohexanone, and the still bottoms from the recovery of these solvents.
- F005 The spent non-halogenated solvents, methanol, toluene, methyl ethyl ketone, methyl isobutyl ketone, carbon disulfide, isobutanol, pyridine, and still bottoms from the recovery of these solvents.
- F006 Heavy metals (less than .01) As, Co, Cr, Cu, Hg, Be, Pb, Mi, Va, Se, Sn.
- D001 General ignitable waste solvents (flash point less than 140° F).
- K078 Solvent cleaning wastes from paint manufacturing.

East Coast Chemical Disposal, Inc. also handles solvents which a customer must discard because it is off-specification. These solvents, with corresponding hazardous waste numbers, are as follows:

- U002 Acetone
- U031 N-butyl alcohol
- U044 Chloroform
- U045 Chloromethane
- U075 Dichlorodifluoromethane
- U080 Dichloromethane
- U112 Ethyl acetate
- U140 Isobutyl alcohol
- U154 Methanol
- U159 Methyl ethyl ketone
- U161 Methyl isobutyl ketone
- U171 2-Nitropropane
- U210 Tetrochloroethylene (TCE)  
(Perchloroethylene) (PCE)
- U213 Tetrahydrofuran
- U220 Toluene
- U226 1,1,1, Trichloroethane

The proposed facility is a 12,130 square foot building situated on a 1.08 acre site in an area zoned for industry.

All operations, storage and treatment will be within the confines of this building. The building contains a general office, areas providing for drum and tank storage, material and tool storage, treatment and shipment.

Drum and tank storage areas will consist of concrete pads surrounded by concrete dikes. Sump pumps are provided for recovery, if needed. Concrete pads will contain a thick layer of vermiculite to absorb any spills.

Container storage capacity for hazardous waste will be approximately 260,000 gallons.

Tank storage is limited to two (2) 2,500 gallon heavy steel (1/4" plate) units, but may be increased if need arises.

ECCD, in most cases, will transport any combination of compounds which can be classified as organic solvent to a Resource Recovery Facility. These mixtures come from a wide variety of industries which use solvents in their operations.

Basic treatment operation is to neutralized acids, caustics, and to raise flash points to an acceptable level for transportation to a certified Class A1 Disposal area. Fly ash, lime and vermiculite are common items used.

The following breakdowns of components are representative of the types of waste expected to be received for storage and/or treatment.

#### Automotive Industry

Waste Solvent Composition:	Toluene	40%
	Acetone	20%
Flash point 28°F	Methyl Ethyl Ketone	20%
Specific gravity .85 - .95	Isopropyl Alcohol	15%
pH 7	Dirt, Organic pigments	5%

#### Electronics Industry

(can be chlorinated or fluorinated solvents such as 1,1,1, trichloroethane, Trichloroethylene, 1,1,2, Trichloro, 1,2,2, Trifluoroethane)

pH 3-9	Waste Solvent Composition:	Pure Component	90%
	Specific gravity 1.1 - 1.6	Non-hazardous resin	10%
	Flash point	None	

#### Paint Industry

Waste Solvent Composition:	Toluene	40%
pH 7	Acetone	20%
Flash point 92°F	Methyl Ethyl Ketone	20%
Specific gravity 1 - 1.2	Isopropyl Alcohol	15%
	Organic pigment	5%

Metal Cleaning Industry

(Solutions of chlorinated hydrocarbons)

Waste Solvent Composition:	Perchlorethylene	85%
	Dirt, soil	15%
	or	
Specific gravity 1.1 - 1.6	Methylene Chloride	80%
pH 3-9	Dirt, soil	20%
Flash point None		

Others

ECCD can receive many types of organic solvents from various industries such as:

Butyl cellosolve, Methanol, Xylene, Butyl acetate, Ethylene Dichloride, Mineral spirits, Heptane, etc.

264.14 Security

ECCD will maintain security on its Bristol Township facility in several fashions. First of all, the facility is located on Hartel Avenue in an industrial park, patrolled regularly by security forces. The active portion of the facility will be located within the building of the plant itself which will be locked when not in use. During normal work hours, there will, of course, be the security provided by plant employees. In addition, artificial barriers will be placed around the entire facility so that the entire facility will on all sides be enclosed either by fences with locked gates or by the building walls themselves. All entrances to the building will be locked. In addition, special signs with the legend "Danger Unauthorized Personnel Keep Out" will be placed on all doors of the building except for the main entrance to the business office on Hartel Avenue. The same sign will be placed at the delivery entrance gate.

Since the predominant population in this area is entirely English speaking, security signs will be in English only. It is estimated that the signs will be legible at a distance of 150 feet.

The above security measures are evident and are marked on the diagram of the facility which will be available as a diagram in supply numbers.

265.15 General Inspection Requirements

ECCD will have from the start of its operations a regular program of inspections specifically oriented to determine and correct the malfunctions and deterioration of the plant, to detect operator errors and to detect and prevent and correct any discharges which may occur. A posted written schedule will be followed in these inspections. Waste con-

tainers, storage areas, the processing area itself, and any areas where spills would be likely to occur will be inspected on a daily basis. The chemical containers will be inspected especially for leaks and seam problems. Detection of problems with the containers should be relatively easy to accomplish since many of them will be filled and emptied during the same day. Simple visual inspection should be adequate on this daily basis. Periodically, which will mean approximately quarterly, an instrumental inspection on the containers will be conducted using electronic atomic absorption devices to determine the thickness of the container. From this information, structural strength of the container, the probabilities of its developing leaks in the near future, and a projected estimate of container life and wearability will be obtained.

Written records will be kept of all inspections. These records will be kept for a period of five (5) years. Included in the records will be the name of the inspector, the date and time of the inspection, and a notation of any special observations. Any repairs that are made to the equipment or containers will also be noted both as to their nature and the date and time which they are performed. The ultimate responsibility for monitoring these records and ensuring that they are kept up to date will be that of the foreman, the plant operator as well as the owner. The philosophy of an inspection will be based on the rate of possible deterioration of the equipment and the probability of a leak or malfunction that will pose a problem to environmental health or human health. Deterioration and wear out is, of course, a function of both time and the intensity of use. A good deal of information on the rate of deterioration or failure is available from written records from manufacturers, from the existing data kept by ECCD and from published data for similar operations. With time, this information can be kept on a more sophisticated basis with estimates of deterioration used in planning and updating the facility. This will be facilitated as ECCD develops on going experience at the facility. The initial plan schedules for inspection and monitoring are given in the Tables to this section. The survey of the projected schedules for containers, movement of equipment, safety and emergency equipment, monitoring equipment and security equipment at the plant will meet requirements. Equipment repair or container repair will be conducted as quickly as possible. Where deterioration has created a situation where hazard may be imminent, remedial action will be taken at once.

Daily inspections will be primarily the responsibility of the foreman. He may assign this task during the day to any of



the employees. However, it will be his responsibility at the end of the day to conduct a walking tour of the plant and make sure that there are no leaks or spills in any area. One employee will be designated to do this should the foreman be ill or absent.

#### 265.16 Personnel Training

All personnel will be required to complete a course of training which will enable them to perform their specific duties in keeping with EPA and state regulations and with requirements of the RCRA. No employee will be allowed to work unsupervised until he has successfully completed the training program. Training records will be maintained of the progress of each employee. Each employee will be tested intermittently during the program to ensure satisfactory progress. Each new employee will be considered probationary for a period of ninety (90) days during and following this period of training. The training program will begin as a series of classroom exercises for the present employees. All employees, present and future, will be issued at the date of their hiring, a series of training aids and information which will augment their classroom and on the job training. Training records, tests and records of student progress will be kept for a period of five (5) years. In addition, as technological or other changes may require there will be periodic seminars and sessions for all employees dealing with changes in the procedure or changes in the relevant technology. This will be especially important when new equipment is introduced. The overall training program will be based and integrated into the existing philosophy that no system is more sophisticated than those who run it. And in keeping with our company philosophy of first developing a powerful and experienced corp of staff and adding the technological sophistication to it.

In addition to basic training and special seminars, there will be an annual review for all employees of the firm on the basic training. This review will stress, however, the sections required by EPA regulations in Sections 265.16 paragraph A in the Federal Register of May 19, 1980. This particular material will emphasize the procedures employed during emergencies including the use, inspection, repair, replacement of emergency equipment, the various communication systems and networks, the emergency alarm system, the response in case of fire or explosion, the response in event of pollution incidents, as well as a section on the total shutdown of operations in an emergency.

It is estimated that all employees will be expected to complete the testing program within ninety (90) days after

their employment. The first part of the employee training program will be concerned with personal safety. Each employee will have a tour of the plant, showing him or her the location of all the emergency equipment, first-aid stations, emergency shut-off equipment, the fire prevention alert system, the fire alarm system and a brief orientation to the communications system in the event of an emergency, all necessary safety gear and instructed in its use. This gear is summarized in Table 265.16-1. In addition, each employee will receive a copy of the general emergency numbers to call in the event of an injury to plant personnel or anyone else occurring due to an accident or from release of hazardous waste. This information is summarized in Table 265.16-2.

In order to ensure that all personnel know what to do in the event of an emergency, fire, explosion or other emergency, a series of hand-outs will be given to all personnel. The hand-outs to be given are listed in Table 265.16-3. Each hand-out or set of guidelines will include not only the duties of the various personnel but also a description of the communications that are to be given and the flow of communication. While all facility personnel must become involved in an emergency, even if only to vacate the facility, it is the normal function and responsibility of the key personnel which deals specifically with the hazardous waste to see that all follow regulations. At this facility most of the personnel would fall into this category. It is the proper functioning of these personnel, in their day to day jobs, which eliminates the need for emergency responses by eliminating emergencies. The additional training given to these active waste handling personnel will be specific training appropriate to their job functions. Table 265.16-4 lists the categories of personnel, their specific duties included in a job description, and the additional training that they will receive.

#### 265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

The general safety provisions employed by ECCD give a reasonable protection against accidental ignition or reaction of wastes. However, several other measures which might be of note here will be used to specifically guard against these dangers. No open flames, cutting or welding equipment or radiant heating units will be used in the shop area. Smoking will not be permitted in the shop area and "no smoking" signs will be conspicuously placed. The same provisions will be made outdoors in the loading and receiving areas whenever waste is present in these areas. Smoking will be entirely prohibited except in the area of the office. To avoid friction as a source of heat or sparks, non-sparking tools will

be employed in all the processes of either the shop area or the loading and receiving area. Incoming wastes that are more than slightly acid or basic will be neutralized immediately upon unloading. Wastes which appear to be highly ignitable will be treated prior to entering the facility and special treatment may also be applied immediately upon reception as well. Treatment at the facility involves solidifying the waste through the addition of fly ash and vermiculite. This treatment also reduces the probability of any reactions. The present wastes received by ECCD appear to be quite compatible for comingling and do not give off uncontrolled toxic mists.

TABLE 265.16 - 1

PERSONAL EMERGENCY EQUIPMENT

Safety glasses

Hard Hat - Safety Cap

Chemical resistant gloves

Coveralls

Respirators or oxygen masks

Safety shoes or boots (with non-slip soles)

TABLE 265.16 - 2

GENERAL EMERGENCY SERVICES

The Edgely Fire Company and Ambulance/Rescue services are coordinated through a single emergency phone:

943-1200

The local (Bristol Township) police are reached through:

949-2000

Road emergencies in other sections of Bucks County are handled through the county-wide number:

547-5222

ADDRESSES

Edgely Fire Company - Bath Road

Ambulance Services: dispatched through 943-1200, in order of priority.

1. Levittown/Fairless Hills Rescue Squad  
7405 Newportville-Fallsington Road, Levittown  
946-1223
2. Bucks County Rescue Squad  
3801 Otter Street, Bristol  
788-0444

Hospital Selected: in order of priority.

1. Request of Patient
2. Request of Emergency Coordinator, East Coast Chemical Disposal, Inc.
3. General cases, no hospital specified:  
Lower Bucks Hospital  
Bath Road and Orchard Avenue  
Bristol, PA  
785-9200
4. "Back-up" hospital:  
Delaware Valley Medical Center (Osteopathic)  
Wilson & Pond Streets  
Bristol, PA  
245-2200

TABLE 265.16 - 3

TRAINING INFORMATION

TO BE DISTRIBUTED TO ALL PERSONNEL

- \* Response guidelines in event of fire or explosion.
- \* Response guidelines in case of a release of hazardous waste.
- \* Evacuation plan for facility, organized by department.
- \* Up to date list of personnel with CPR and first aid training.
- \* Guidelines for response to groundwater or surface water contamination due to release of hazardous waste.
- \* Guidelines in event of a total shutdown of facility operations.
- \* Basis information on alarm and communications systems.
- \* List of key emergency phone numbers.

EAST COAST CHEMICAL DISPOSAL, INC.

PERSONNEL TRAINING PROGRAM

LESSON NO. 1

EMERGENCY RESPONSE IN EVENT  
OF FIRE OR EXPLOSION

Classroom instruction time 1-1/2 hours  
Question and answer session 15 minutes  
Testing time 15 minutes

Coverage: CFR 40-Sec. 264-56

TOPICS DISCUSSED:

- A. Subpart D Section 265.50 through CFR 40-265.57.
    - 1. General discussion and coverage of subpart D.
  - B. Overall coverage of types of fires and kinds of equipment pertaining to and relating to our facility operation.
- I. Three types of fires are wood, electrical, and chemical.
- A. A wood fire is classified as combustible.
    - 1. To control: Use water to quench or cool fire.  
A dry powder chemical may also be used effectively.
  - B. A chemical fire is caused from vapor air mixtures over flammable liquids igniting.
    - 1. To control: Use dry chemical powder (preferred), also can use foam, vapor liquid, or water fog spray depending on circumstances.
  - C. Electrical fires usually start through short circuiting or overload on line, etc.
    - 1. To control: Use only non-conductive dry chemicals or carbon dioxide.
- II. Flammable Liquids: The Four Characteristics
- A. Fire point - lowest temperature that a flammable air vapor mix will ignite without spark or flame.
  - B. Flash point - lowest temperature that liquid gives off enough vapors to ignite.
  - C. Ignition temperature - temperature that a flammable vapor air mix will burn without ignition.
  - D. Flammable or explosive range - the range between the smallest and largest amount of vapor in a given quantity of air which will explode or burn when ignited.
- III. Classification
- A. The classification (properly) of fire is of vital importance as it determines the way the fire must be put out.



IV. Elements

- A. There are three (3) elements needed to make a fire burn. They are:
  - 1. Heat - to stop fire remove the heat.
  - 2. Fuel - to stop fire remove the fuel.
  - 3. Oxygen - to stop fire remove the oxygen or stop the reaction.

V. Prevention

- A. An effective in-plant fire protection plan depends two (2) things. They are:
  - 1. Knowledgeable personnel.
  - 2. The correct and sufficient amount of fire fighting equipment (CFR 264.32).

VI. Instructions

- A. The proper way to use dry powder extinguishers.
- B. In event of fire, take action as prescribed (CFR 40-264.56) in company emergency response program.
- C. Learn how and when to use intercom for emergency.
- D. Who to call? Fire department first? Coordinator first?
- E. How to identify characteristics of fire and type and danger involved.
- F. What's involved? Drums, tanks, equipment, electricity? Or solvent spill?
- G. Should emergency switches (electric) be shut off?

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. What is the most important thing to remember in case of a spill or release of hazardous waste?
2. What action do you take if a tanker overflows during loading operations?
3. Name the emergency coordinator for response.
4. Do you need to manifest any earth (soil) that has been contaminated from a spill and removed?
5. In event of a spill is it necessary to shut-off all ignition sources.
6. What type of personal safety equipment is used when cleaning up a spill?
7. If you had to evacuate would you be able to do so without indecision?
8. Where is the closest phone in relationship to your work area?
9. Name 3 kinds of flammable solvents.
10. What is the name of the person in your area with C.P.R. and Red Cross training?
11. Should you fill out a spill report for five (5) gallons or less spilled?
12. Are our emergency portable pumps explosion proof?
13. Name three (3) actions needed for an in-plant emergency response for a release of hazardous waste, e.g. a drum of flammable liquid ruptures while loading.
14. What happens when a halogenated solvent comes in contact with open flame?
15. Are vapors harmful?

16. Approximately how much liquid can an absorbent (hazorb) bag soak up?
17. What method do we use as an alarm for emergency response?
18. Where is the closest exit from your work area?
19. What is meant by the character of the release?
20. If you had a spill or release of hazardous waste while in transit, which one of these authorities would you call 1st, 2nd, 3rd, etc.
  - (a) highway patrol,
  - (b) plant emergency coordinator,
  - (c) National Emergency Response Center,
  - (d) fire department.

EAST COAST CHEMICAL DISPOSAL, INC.

PERSONNEL TRAINING PROGRAM

LESSON NO. II

EMERGENCY RESPONSE IN EVENT  
OF A RELEASE OF A HAZARDOUS WASTE

Classroom instruction time 1-1/2 hours  
Question and answer session 15 minutes  
Testing time 15 minutes

TOPIC DISCUSSED

General instructions covering CFR-40-264.16:

All employees are required to become familiar with and to learn the location of all in-plant emergency equipment, e.g. shovels, hoes, sand, soda ash, pumps, hoses, fire extinguishers, absorbent bags, etc.

- I. Emergency procedure as programmed for our facility in event of a spill or release of a hazardous substance.
  - A. Try to identify the character of the spill or release as instructed in lesson number one.
  - B. Identify the source, amount and real extent of release.
  - C. You must notify your emergency coordinator (via intercom if necessary) and your immediate supervisor.
  - D. Stand by with all necessary fire equipment in case of an ignition.
  - E. Suspend all operations until spill (as in case of a ruptured drum of flammables) is cleaned up and vapors have dissipated.
  - F. Don't allow spill to escape from paved area onto ground area, dike if necessary.
  - G. Don't allow any vehicle to operate in close proximity of spill (because of possible ignition) until cleaned up.
  - H. If ground has been contaminated follow CFR-40-264.56(g)
  - I. When clean-up is finished in regard to reporting if necessary refer to CFR-40-264.33.
  - J. All instructions have covered events typical of and pertinent to our operation e.g. flammables, combustibles and halogenated solvents (ORM-As). We also closely follow the emergency guidelines set forth for our facility.

EAST COAST CHEMICAL DISPOSAL, INC.

PERSONNEL TRAINING PROGRAM

LESSON NO. III

NEW FEDERAL & STATE RULES & REGULATIONS FOR  
THE GENERATOR & TRANSPORTER & TREATMENT  
STORAGE OR DISPOSAL OF HAZARDOUS WASTE

R.C.R.A.

E.P.A.

D.O.T.

D.E.R.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF HEALTH

Classroom instruction time 1-1/2 hours  
Question and answer session 15 minutes  
Testing time 15 minutes

TOPIC: E.P.A. - Environmental Protection Agency  
D.O.T. - Department of Transportation  
D.E.R. - Department of Environmental Resources

- A. Direct impact - CFR 49, Section 172.205(a)
  - 1. No person may offer for transportation, transport, transfer, or deliver a hazardous waste, unless a hazardous waste manifest is prepared, signed, carried and given as required of that person by this section.
- B. Direct impact - CFR 40, Section 262.12
  - 1. A generator must not treat, store, dispose of, transport or offer for transportation, hazardous waste without having received an EPA identification number from the administrator.
  - 2. A generator must not offer his hazardous waste to transporters, treatment, storage, or disposal facilities that have not received an identification number from EPA.

With the advent of RCRA (Resource Conservation and Recovery Act - Section 3001 through 3008) and the inception of EPA (CFR 40, 262 - and new DOT rules) we now have adequate tracking of hazardous waste. E.g. (a) identification numbers, (b) manifesting, (c) record keeping, (d) reporting, to give us "the cradle to the grave" tracking system, and any violation of the new rules can bring heavy penalties and fines. RCRA Section 3008.

The accompanying EPA booklet has been our guide in class instruction and we feel we have covered it fairly accurately.

TEST: LESSON NO. III

Instructor\_\_\_\_\_Date\_\_\_\_\_

Employee's name\_\_\_\_\_Grade\_\_\_\_\_

Job classification\_\_\_\_\_

1. Who is E.P.A.? Give their full name.
2. Who is D.O.T.? Give their full name.
3. Who is D.E.R.? Give their full name.
4. What is their function?
5. How are they related?
6. Explain the "cradle to the grave theory".
7. What is the minimum fine for a violation?
8. What does T.S.D. stand for?
9. What denotes a T.S.D. facility?
10. How long can you store hazardous waste before you become a storage facility?
11. How many inches of hazardous waste can be left in a 55 gallon container and still be called empty?
12. Is oil from halogenated solvents considered a hazardous waste?
13. Give the definition of a hazardous waste.
14. Name the four characteristics.
15. When is a manifest necessary?
16. When do you become a generator?
17. Is all waste listed in 262-131 hazardous waste?
18. 1000 kilograms represents approximately how many drums?
19. How many pounds is 1000 kilograms?



EAST COAST CHEMICAL DISPOSAL, INC.

PERSONNEL TRAINING PROGRAM

LESSON NO. IV

MANIFESTING A HAZARDOUS WASTE

Classroom instruction time 1-1/2 hours  
Question and answer session 15 minutes  
Testing time 30 minutes

TOPICS DISCUSSED

Manifesting:

- A. Generator
- B. Transporter
- C. T.S.D. Facility

Subpart B, CFR-40 Section 262.20 through 262.23.

Instruction covering:

- A. Newly formulated EPA rules and regulations that went into effect November 20, 1980 (CFR-40-262) and their effect, step-by-step explanation using the State of Pennsylvania hazardous waste manifest as an example.
- B. Copies (filled in examples) of new hazardous waste manifests were given to each one present. Also, a copy of hazardous waste labels that will be required on each drum of hazardous waste offered for transportation as per CFR Title 49 Section 172.304 and CFR 40 Section 262.32.
- C. Explained that all shipments of hazardous waste in bulk or drums must be accompanied from cradle to grave by a State of Pennsylvania hazardous waste manifest. Explained in detail as to how it should be filled in, by whom it should be signed, and that all four (4) copies must be legible. Signatures should be full name (not initials) and legible.
- D. Explained that a small generator is one who generates less than 1,000 kilograms (or 2,205 pounds) of hazardous waste a month, which is approximately four (4) drums and does not need an EPA number but still must fill out a hazardous waste manifest and state he is a small generator in order to transport his waste. The small generator can't keep material longer than 90 days on his premises without becoming a storage facility.
- E. Copies go to who and where?
  - 1. #1 white copy to TSD facility (send copy to DER)

2. #2 pink copy to transporter from TSDF.
  3. #3 green copy to generator from TSDF.
  4. #4 yellow copy generator keeps (send copy to DER).
- F. Who has to fill out manifests? Anyone who transports or offers for transport any amount of hazardous waste.
- G. Manifest is also a shipping document.
- H. The new hazardous waste labels that must be on each drum and dated and filled out are in addition to and not separate from the previously existing DOT rules and regulations regarding specified containers and correct labeling. We need to make sure we don't transport leakers, that they have proper gaskets, the bungs are tight and tops are clean and free from resin or oil.
- I. The DOT hazardous waste label "ORM-E" would be placed on all chlorinated and fluorinated waste solvent as Solvent N.O.S. (chlorinated).
- J. Line number 9 on the manifest must be filled in.
- K. Empty drums will be picked up under CER Title 49, Section 173.29 on our regular packing slip or invoice and not on the hazardous waste manifest. Trucks will be placarded flammable if the empty drums last contained flammable liquid.
- L. Customer must have a manifest for each type of hazardous waste we are to pick up. Example:
- 2 drums, 50 gallon each, of F-005 Flammable Liquid, N.O.S.  
4 drums, 50 gallon each, of D-001 Flammable Liquid, N.O.S.  
8 drums, 50 gallon each, of F-002 Solvent, N.O.S. ORM-E
- M. Customer has been notified that for safe transportation drums of hazardous waste should (because of vapor pressure) be filled to only 50 gallons maximum. The customer is responsible for holding drums for 24 hours before shipping to check for leaks.
- N. If there are any discrepancies noted, such as wrong count, wrong label, leakers, bulged top or bottom, a drum labeled acid or caustic, or if it contains other material, do not change the manifest. The manifest can only be changed by the responsible party who signed it and the change must be initialed by him or her. Please call the office before taking any action. The manifest is also a shipping document.

SECTION #1

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. What is the reason for a manifest?
2. When do you use it?
3. Are manifests different in different states?
4. If there is a conflict between city, county, or state and federal regulations, what rule applies?
5. How many copies are needed?
6. How are they distributed?
7. How many digits are in transporter numbers (Pennsylvania)?
8. Is it all right to write-in filling out the manifest?
9. Is it all right to abbreviate e.g. M.E.K., I.P.A.?
10. Can you leave some areas like #6, #7, #8 blank if you don't understand?
11. If material were new but just off-spec. what number would you use?
12. When is the optional table (CFR-49-Sec. 172.102) used to identify waste components?
13. What are the four (4) characteristics of hazardous waste?
14. Is the manifest acceptable as a shipping document?
15. What is meant by units?
16. Must a transporter always take the hazardous waste to the T.S.D. facility designated on the (paperwork) manifest?
17. What is the UN/NA number and when does it go into effect?
18. How long can you store hazardous waste without becoming a storage facility?
19. What is the hazard class for mixed chlorinated or fluorinated solvents?
20. What waste number is used for mixed halogenated solvents used in a heated degreaser?

TEST: LESSON NO. IV  
(SECTION #2)  
MANIFESTING

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

Notice to students attending this class:

At the close of the question and answer session, a blank copy of the Commonwealth of Pennsylvania hazardous waste manifest will be given to each student to fill in correctly using the example given and the information therein. These manifests will be graded for accuracy and recorded.

Manifest the following example:

20 drums of hazardous waste lacquer thinner.  
Component % approximately:

30% - Methyl Ethyl Ketone

20% - Toluene

16% - Paint Sludge

4% - Water

4% - Acetates

14% - Ketones

6% - Aromatics

6% - Esters

for fictitious names use Mary Doe, John Doe, etc.

EAST COAST CHEMICAL DISPOSAL, INC.

LESSON NO. V

LABELING OF HAZARDOUS WASTE

## Lesson V

Classroom instructions time 1-1/2 hours

Question and answer session 15 minutes

Testing time 15 minutes

### TOPICS AND AREA DISCUSSED:

C. CFR 40	- Pretransportation requirements EPA & DOT Regulation
262.30 CFR 40	- Packaging - CFR 49, Section 173.178, 179
262.31 CFR 40	- Labeling - CFR 49, Section 172.334
262.32 CFR 40	- Marking - CFR 49, Section 172.101
262.33 CFR 40	- Placarding - CFR 49, Section 172.504
262.34 CFR 40	- Accumulation Time
265.173 CFR 40	- Leaking Packing - CFR 49, Section 177.854
265.177 CFR 40	- Compatability in storage
261.6 CFR 40	- Hazardous Waste Label

Class was instructed in all the above sections noting that EPA rules are in addition to, and not separate from, DOT's rules and regulations and that whenever a city, county, or state regulation comes in conflict with federal regulations then most stringent rule shall apply.

## TEST: LESSON NO. I

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. Name 3 types of fires.
2. What is their classifications using A.B.C.?
3. Name 3 kinds of fire fighting equipment?
4. Name 3 kinds of agents used to fight fires?
5. What kind of fire is each used for?
6. What are the first 3 things you should do if you sight a fire?
7. Name the locations of emergency power shut-off switches.
8. How many are there?
9. Explain the difference between a controllable fire and an uncontrollable fire.
10. What is the procedure for giving an alarm?
11. Where are emergency phone numbers listed?
12. On the 3 plot plans showing location of buildings, grounds, etc., fill in the location of each of the following using the signs given:

Plot Plan #1



Emergency electric power shut-off  
 Phones for emergency alarm system  
 Mobil (dry powder) fire extinguisher  
 Portable hand held extinguishers

Plot Plan #2



Fire hose (box)  
 Water hydrant  
 First aid station  
 Emergency showers and eye wash

Plot Plan #3



Oxygen mask  
 Fire blankets  
 Stretchers  
 Exits



TEST: LESSON NO. V

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. What kind of DOT container is needed for shipping 55 gallons of waste methyl ethyl ketone?
2. What kind of a DOT container would you use if shipping 55 gallons of waste acetone?
3. Would you place a hazardous waste label on top or the side of the drum?
4. Would an empty 55 gallon drum which previously contained hazardous waste need to be manifested?
5. What is EPA's definition of an empty container?
6. Do you need to put the accumulation date on a hazardous label?
7. What is the definition of an incompatible substance?
8. Where in CFR 49 would you look to find the proper shipping name?
9. How long must a generator keep a drum of hazardous waste before shipping? Why?
10. Should the generator and transporter section in a manifest be filled out correctly before transporting?
11. Write a proper shipping name for a mixture of hazardous waste e.g. 20% acetone, 40% mineral spirits, 40% kerosene.
12. Write a proper shipping name for a mixture of hazardous waste e.g. 30% 1,1,1, trichloroethane, 30% perchlorethylene, 40% methylene chloride.
13. Write the name of at least two (2) halogenated solvents.
14. Name two (2) non-halogenated solvents.
15. What is the definition of solid waste?
16. Describe what would constitute a packaging of hazardous waste that was ready to be transported or shipped and what would be required. (list them)

EAST COAST CHEMICAL DISPOSAL, INC.

LESSON NO. VI

HANDLING AND INSPECTION OF HAZARDOUS WASTE  
REQUIREMENTS, COMPLIANCE, PRECAUTIONS, ETC.

## Lesson VI

Classroom instruction time 1-1/2 hours

Question and answer session 15 minutes

Testing time 15 minutes

### TOPICS DISCUSSED

Storage of hazardous waste and use and management of Subpart I  
CFR 20-265.170, CFR 265.171, 265.172, 265.173, 265.174,  
265.176, 265.177, 265.190

Instructions were given in detail regarding the EPA's management Section.

Class was instructed to make sure before receiving any hazardous waste that the transporter has obeyed all rules and regulations and that the containers, if brought in drums, were properly labeled with accumulation dates and labeled in accordance with DOT regulations, with correct EPA waste (hazardous) label on drum and that containers were in proper condition using the following steps:

1. Make sure manifest is in order.
2. Make sure labels on drums match the information on the manifest.
3. If there is any discrepancy in count, so note on manifest before giving transporter his copy.
4. After unloading check all drums to see if they are in good condition or leaking. If needed, transfer the ones that don't comply.
5. Before opening drums loosen bungs slowly to allow any pressure (air) to escape.
6. Wear proper safety equipment e.g. approved chemical gloves, long sleeves, goggles or safety glasses, steel toed shoes, hard hat.
7. After removing bungs, use pH test tape to ascertain if any drum of material is either acid or caustic (pH below 4 or above 10) in nature before attempting to sample.

TEST: LESSON NO. VI

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. What label is required by EPA on a drum of waste?
2. Where should the label be placed? Why?
3. What is a pH?
4. What is the EPA test for corrosive waste on pH?
5. How often should storage area be checked for leakers?
6. How full should a 55 gallon drum be filled to be safe for transportation?
7. What safety precautions should be taken before opening a drum?
8. If we notice that a drum of waste is leaking should we transfer it immediately or wait until we have time?
9. Is it all right to tighten a bung on a drum without a gasket? Are gaskets required?
10. Is it all right to legally accept drums other than DOT 17 E 18/20 steel closed-head drums?
11. If so, what kind?
12. In accepting a shipment, when should you report a discrepancy?
13. Is the EPA number and the manifest number supposed to be on the hazardous waste label?
14. What about the accumulation data?
15. What is the wording of the warning on the hazardous waste label?
16. Why is routine inspection so vital?
17. Describe a representative sample.

EAST COAST CHEMICAL DISPOSAL, INC.

LESSON NO. VII

TRANSPORTATION OF HAZARDOUS WASTE  
DRIVER'S DUTIES AND RESPONSIBILITIES

## Lesson VII

Classroom instruction time 1-1/2 hours

Question and answer session 15 minutes

Testing time 15 minutes

### TOPICS DISCUSSED

C.F.R. Title 49, Section 172-178, Parts CFR 40 Federal  
Motor Carrier Safety Regulations Parts 390-397

- I. D.O.T. Regulations
  - A. Qualifications for driving, Part 391 FMC.
  - B. Maximum driving time and on duty time, FMC, Part 395.
  - C. Driver's daily log, FMC, Part 395.8.
  - D. Placarding of vehicles, CFR 40-262.34.
  - E. Shipping papers (empty drum pick-up), CFR 49-172.18.
  - F. Out of service drivers, FMC 395.13.
- II. Safety Practices
  - A. Responsibilities
  - B. Alcoholic beverage, drugs, FMC 391.41.
  - C. Driving while ill or fatigued, FMC 392.3.
- III. Fire Prevention
  - A. Fueling precautions, FMC 392.50.
  - B. Extinguisher capacity.
- IV. Safe Driving
  - A. Loading
  - B. Product drum-off.
  - C. Customer relations.
  - D. What to do in case of accident, CFR 394.9.
- V. Vehicle Inspection
  - A. Maintenance.
  - B. Inspections.
  - C. Repairs.

VI. Transporting and Driver Instruction

- A. Hazardous waste labels for drums to be carried by drivers for customers.
- B. Driver to call in in the event manifest not filled out or if there is a discrepancy.
- C. Empty containers will be picked up under CFR Title 49, Section 173.28 - 173.29 and will not be carried on hazardous waste manifest; it will still be carried on bill of lading book or packing slip at empty drums returned last contained flammable liquid; combustible liquid; or solvent n.o.s. ORM-E.
- D. We will only pick-up waste in steel D.O.T. approved drums.
- E. Our standard bill of lading will still accompany bulk manifest with our manifest number on it for our in-plant bookkeeping (no copy to customer).
- F. Bulk tanker drivers should always carry safety glasses, chemical gloves, long sleeve shirts, steel-toed shoes, and a hard hat. These items must be worn whenever loading or unloading, connecting or disconnecting hoses with solvent at customer's plants as well as at ECCD. Bulk tanker drivers must also always use ground wires.
- G. Every driver should be able to answer any question directed to him that is pertinent to the transportation and safe handling of hazardous waste and hazardous substances.
- H. All drivers will carry all applicable DOT labels and supply them to customers when needed.

When you are preparing to transport a hazardous waste you should find the manifest properly prepared and signed. You should check to see if this is correct. You should also check each drum to determine if it is properly labeled, the bung tight and the drum in proper condition for shipment. If you find any errors you should attempt to correct them if possible. For instance, if labels are missing you can supply them so the customer's employee can affix them properly. If labels are left on drums which should not be there such as red labels on chlorinated solvent drums, they can be crossed out so it is obvious they no longer apply. If the waste labels are not filled out, ask that they be completed. Check for leaks.

All the drums must comply with DOT regulations. If you determine that there are some drums which are not in keeping with the manifest, you should change the number of drums on the manifest. For instance, if the manifest calls for 15 drums of Perchloroethylene but 2 drums are something else other than what is written on the hazardous waste labels, then you should change the manifest to 13. If the manifest is already signed you must obtain approval from whomever signed it before making the change. If that person is not available, you must obtain permission from another authorized person. If a change is made it should be done as follows: ~~15~~ 13 (J.D.). You cannot erase on the manifest. It must be initialed by the person who signed it or another authorized person.



TEST: LESSON NO. VII

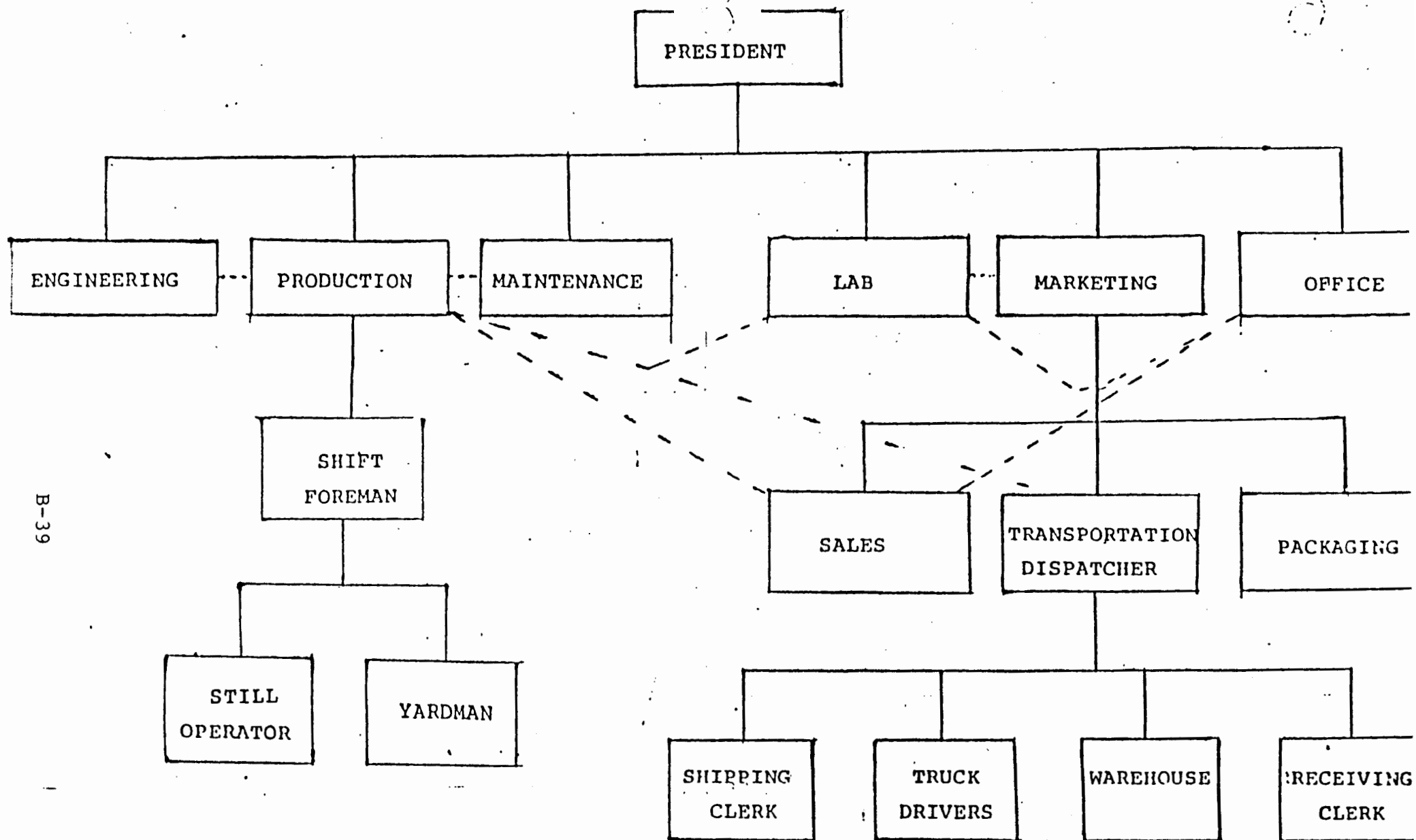
Instructor \_\_\_\_\_ Date \_\_\_\_\_

Employee's name \_\_\_\_\_ Grade \_\_\_\_\_

Job classification \_\_\_\_\_

1. What is meant by limited quantity?
2. Where can a vehicle placarded "flammable" park legally?
3. Can you fill your log out at the end of the day or do you need to after each delivery?
4. How often should you check your tires?
5. What emergency response equipment do you carry on your truck, tanker, etc.?
6. Where are shipping papers kept while in transit?
7. Is the transporter responsible for a hazardous waste release if the hazardous waste he is transporting reacts and explodes while in transit?
8. How large of a fine can you receive for violation on an EPA or DOT regulation covering transporters?
9. What are two (2) ways to determine proper placarding?
10. Are drivers required to carry extra DOT labels when hauling hazardous materials in drums?
11. Which do you ground to first when unloading a flammable product? (a) to tank (b) to truck?
12. What are the rules in regards to driving time? Can you drive for 12 hours at a time?
13. If you are carrying a corrosive from one company and a flammable from another company in a bulk tanker, how would you placard it? (1,000 gallons of each)
14. How often do you need to take a physical?

15. If you discover a leaking drum while in transit what action do you take? Please describe the four (4) steps.
16. If you are in the process of accepting a load of hazardous waste for transportation and find the manifest has some discrepancies what should you do?
17. Where would you look to find the proper shipping name of a hazardous material?



\_\_\_\_\_ = Directly responsible to.

----- = Co-working with other department heads.

I. Job Descriptions

Qualifications may be waived at the option of Management if in their judgement there exists equivalents to the stated requirements.

PRESIDENT

I. Qualifications:

1. Education: \*4 year degree from accredited college or university.
2. Experience: \*10 year minimum.

II. Requirements:

1. Must complete company training program.
2. Knowledge of Waste Analysis Plan.
3. Knowledge of Waste Management Procedure.
4. Knowledge of products including safety data sheets.
5. Knowledge of company's policy and procedures.
6. Knowledge of accounting procedures.
7. Familiarization with EPA, DOT and other regulations.
8. Knowledge of Emergency Contingency Plans.
9. Attend outside training workshop and seminars to keep employees and customers informed.
10. Possession of a valid Pennsylvania Drivers License with a good driving record.

III. Duties:

Coordinates and is responsible for the implementation of:

1. Safety Program for work force and customers.
2. Emergency Response Plans.
3. All company policy.
4. Approval of all company rules and regulations.
5. Training program for all employees.
6. Oversees general operations of the company.
7. Oversees all capitol expenditures.
8. Marketing policies.
9. Financing policies.
10. Budget considerations.
11. Employee relations.
12. Oversees:
  - a. Production.
  - b. Laboratory.
  - c. Maintenance.
  - d. Warehousing.
  - e. Transportation.
  - f. Packaging.
  - g. Sales.
  - h. Engineering.
13. Community participation and involvement.
14. Compliance with all governmental regulations.

CHIEF CHEMICAL ENGINEER

I. Qualifications:

1. Education: Minimum 4 year college or university degree in Chemical Engineering.
2. Experience: Minimum of 4 years experience in engineering, design and/or production in a chemical plant.

II. Requirements:

1. Must complete company training program in the following areas.
  - A. Emergency Contingency Plans
  - B. Knowledge of Waste Analysis Plan
  - C. Knowledge of Waste Management Procedure
  - D. Must be familiar with Material Safety Data sheets for all products.

III. Duties:

1. Design facilities for production, transportation, warehousing and storage.
2. Set-up maintenance program for all equipment.
3. Will be the Chief Emergency Coordinator.
4. Will be a member of the Safety Committee.
5. Shall be responsible for establishing and training of the Emergency Response Team.
6. Shall be a member of the Environmental Coordinating Team.
7. Responsible for arranging for the installation of all facilities, including the utilities; also responsible for obtaining permits to operate and construction permits.
8. Train personnel in operation and safe use of all new production and storage equipment.
9. Undertake cost savings projects in the areas of energy and production efficiency.
10. Research alternatives for waste management.
11. Resource for equipment design and installation at other ECCD facilities.

PRODUCTION MANAGER

I. Qualifications:

1. Education: \*4 years college or equivalent.
2. Experience: \*5 years or equivalent.

II. Requirements:

1. Complete company training program.
2. Knowledge of equipment, including:
  - A. Boilers.
  - B. Stills.
  - C. Film Evaporators.
  - D. Cooling Towers.
  - E. Pumps and Motors.
3. Knowledge of Emergency Contingency Plan.
4. Knowledge of all products including Material Safety Data sheets.
5. Knowledge of all regulations pertaining to the operation of equipment in the plant.
6. Knowledge of spill plans.

III. Duties:

1. Responsible for production of all material through refinery.
2. Responsible for training and informing all workers in his department about safe and proper usage of equipment.
3. Responsible for maintaining a clean plant.
4. Assist maintenance in periodic inspection of all equipment, including tanks, pumps, and motors.
5. Member of Emergency Response Team.
6. Member of ECCD fire fighting team.
7. Perform daily inspections of his department to assure no leaks, spills or other unsafe condition exists.
8. Coordinate with engineering for new equipment and efficient operation of old equipment.

CHIEF CHEMIST

I. Qualifications:

1. Education: \*Minimum of 4 year degree in chemistry from accredited college or university.
2. Experience: \*2 years minimum in one or a combination of the following areas:
  - A. Laboratory procedures.
  - B. Solvent experience in laboratory or related areas.
  - C. Qualitative analysis.
  - D. Quantitative analysis.

II. Requirements:

1. Must complete company training program in the following areas:
  - A. Fire.
  - B. Explosion.
  - C. Spills.
  - D. Other emergency response procedures for laboratory.
2. Knowledge of the Waste Analysis Plan.
3. Knowledge of products including:
  - A. The ability to suggest the proper use of various solvents.
  - B. Material Safety Data.
  - C. Manifesting.
  - D. Knowledge of Waste Management Procedures.

III. Duties:

1. Analyze samples of spent solvents for production and marketing information.
2. Furnish technical information for ECCD products.
3. Will be a member of the Emergency Response Team.
4. Assist marketing department in developing new products.
5. Assist production in testing and other activities.
6. Will be a member of the Safety Committee.
7. Will be a member of the Environmental Coordinating Team.
8. Quality control supervisor.
9. Supervise maintenance of laboratory equipment.
10. Will be responsible for laboratory safety and cleanliness.
11. Will develop laboratory standards for testing of all materials.
12. Will be responsible for Material Safety Data Sheets for all products produced, resold and used by ECCD.



OFFICE MANAGER

I. Qualifications:

1. Education: \*Minimum, degree from accredited secretarial school, business school, university, or equivalent.
2. Experience: \*2 years experience in one of the following areas:
  - A. Secretarial.
  - B. Accounting.
  - C. Business Administration.
  - D. General Office.
3. Must be capable of supervising others who will work in the office.

II. Requirements:

1. Must complete company training program in the following areas:
  - A. Emergency Contingency Plans.
  - B. Employee Benefits.
  - C. Company Procedures and Policies.
  - D. Office Procedures.
  - E. Accounting.
2. Be familiar with Waste Management Program.
  - A. Appropriately filling out manifest.
  - B. Handling and filing of manifest.

III. Duties:

1. Management of clerical work.
2. Responsible for the following:
  - A. Billing and Invoicing.
  - B. Company Correspondence.
  - C. Accounts Receivable.
  - D. Accounts Payable.
  - E. EPA manifest and shipping records.
  - F. Cleanliness and efficiency of the office.
  - G. Will be a member of the Emergency Response Team.
  - H. Will be a member of the ECCD Fire Fighting and Prevention Team.
  - I. Responsible for all office equipment purchases and maintenance.
  - J. Responsible for the hiring and firing of office help.
  - K. Responsible for coordinating and developing office procedures.
  - L. Training of office personnel in emergency response procedures.
  - M. Responsible for collecting and paying sales and other taxes.

SHIFT FOREMAN

I. Qualifications:

1. Education: \*2 years college or equivalent.
2. Experience: \*2 years on still or 1 year or more as yardman or equivalent.

II. Requirements:

1. Completion of company training program.
2. Knowledge of equipment including:
  - A. Stills.
  - B. Cooling tower.
  - C. Boilers.
  - D. Film evaporators.
  - E. Pumps and motors.
3. Knowledge of Emergency Contingency Plan.
4. Knowledge of all products including material safety data sheets.
5. Knowledge of Chemical Emergency Procedures.
6. Knowledge of operation of pumps and equipment needed to perform job as related to shipping and receiving areas.

III. Duties:

1. Responsible for following schedule of materials to be run from production manager.
2. Responsible for cleanliness and safety during his shift.
3. Perform daily inspection for leaks, spills or other unsafe conditions.
4. Assist maintenance in inspection and repairing equipment.
5. Responsible for people on his shift being informed and trained in safe operating practices.

SALESMAN

I. Qualifications:

1. Education: \*4 years college with a degree in Chemistry or Chemical Engineering or equivalent.
2. Experience: \*2 years or equivalent.

II. Requirements:

1. Completion of company training program.
2. Knowledge of all products including application, usage and safety.
3. Knowledge of Emergency Contingency Plan.
4. Knowledge of Waste Management Plan.
5. Knowledge of EPA and DOT regulations including manifest, packing slips, placarding, containers, etc.
6. Familiarization with:
  - A. Laboratory Procedures.
  - B. Production Procedures.
  - C. Transportation Procedures.
7. Possession of a valid Pennsylvania Driver's License with a good driving record.

III. Duties:

1. Promote the sale of ECCD products.
2. Solicit customers for recycling and seek new sources of waste materials to be recycled.
3. Provide customers with technical information on ECCD products and programs, including:
  - A. Material Safety Data Sheets.
  - B. EPA and DOT regulations.
  - C. Advise customers of manifest management.
4. Provide market information to marketing department.
5. Provide information to production and laboratory.
6. Assist transportation department with sales information.
7. Assist credit department with information to keep current the evaluation of a customer's credit status.

DISPATCHER AND TRANSPORTATION MANAGER

I. Qualifications:

1. Education: \*2 years college or equivalent.
2. Experience: \*4 years.

II. Requirements:

1. Complete company training program.
2. Knowledge of all EPA and DOT regulations.
3. Knowledge of Waste Analysis Plan.
4. Knowledge of products, including:
  - A. Safety.
  - B. Manifest completion.
  - C. Packing slips.
  - D. Spill and emergency plans on highway and in the plant.
5. Knowledge of customers locations and hours of business.

III. Duties:

1. Assure that customers receive product when promised.
2. Responsible for training drivers in emergency procedures.
3. Responsible for training drivers in EPA and DOT regulations.
4. Scheduling trucks, shipping and receiving activities.
5. Coordinate inventory and orders.
6. Assist in scheduling and suppliers.
7. Responsible for seeing manifest and invoice packing slips comply with EPA and DOT regulations.
8. Coordinates with maintenance for the scheduling of all trucks for regular maintenance and safety inspections.

BULK SHIPPING CLERKS

I. Qualifications:

1. Education: \*Minimum High School graduate or equivalent.
2. Experience: \*1 year in warehouse or equivalent.

II. Requirements:

1. Completion of company training program.
2. Knowledge of products including Material Safety Data sheets.
3. Knowledge of Emergency Contingency Plans.
4. Knowledge of pump operation.
5. Knowledge of safety in pumping, transferring and transportation of all products.
6. Be familiar with DOT and EPA regulations for storage and transportation of all products.
7. Assist maintenance in upkeep and inspection of all equipment.

III. Duties:

1. Perform inventory control.
2. Perform daily inspection for leaks, spills or other unsafe conditions.
3. Assist laboratory by providing samples for:
  - A. Quality control.
  - B. Sales samples.
  - C. As needed.
4. Assist and inform maintenance of all equipment problems and periodic inspections including:
  - A. Tanks.
  - B. Pumps.
  - C. Lighting.
  - D. Hoses.
5. Make periodic inspections of fire fighting and other emergency equipment.
6. Load and unload trucks.
7. Responsible for any truck leaving the plant from his department meeting all DOT and EPA regulations.
8. Inspect tanks for pollution control equipment to insure it is operating properly.
9. Inspect all tankers before loading to insure they are empty and clean.
10. Responsible for making certain that every truck is properly placarded and that the driver has the proper packing slips.

TABLE 265.16 - 4  
POSITION CLASSES RELATED TO HAZARDOUS WASTE

Job Title	Number	Description and Requirements	Training
Facility Operator	1	Highest level technical or managerial. Responsible for preparation and inspection of manifests, data accuracy, and identification of waste material and detection of discrepancies. Signs receipts of shipment. Responsible for employee training and equipment inspection. Responsible for general planning of facility operation and master scheduling. Directs waste handling and placement procedures; checks material compatibility. Serves as Emergency Coordinator. College level chemistry and experience as manager.	Continuing education (a word "beyond" training) in <u>all</u> relevant aspects of hazardous waste management. Attendance of EPA, DOT, etc. courses and training sessions. All training received by the personnel below.
Foreman	1	Supervision of immediate shop floor and loading area workers. Issues job assignments. Responsible for clean lines and safety. Assists in employee training and equipment inspection. Checks separation of incompatible materials, liquid content of waste, and layering of vermiculite. Previous experience in hazardous waste and with equipment used.	Continuing training in hazardous waste. All training received by personnel below.
Forklift Operator		Moves containers: receiving area to storage area to processing, processing to loading. Experience: 1 year.	Instruction in labeling, placarding, transporting and storing. Static electricity, grounding, sparking.
Labor		Opens, closes, and labels containers. Adds and mixes vermiculite.	Container types and container safety. Static electricity, grounding, sparking.
Driver		Experience: Minimum of 5 years, tractor, trailer, over the road. Check by insurance company. Valid Class I driver's license.	Familiarization with forklift and labor training, DOT and EPA regulations. Spill prevention in transit. Knowledge of types of waste and safety procedures. CFR-49 on driver responsibility, plus manifesting.

RECEIVING CLERK

I. Qualifications:

1. Education: \*High School Graduate or equivalent.
2. Experience: \*1 year as yardman or equivalent.

II. Requirements:

1. Completion of company training program.
2. Knowledge of all incoming material including material safety data sheets.
3. Knowledge of Emergency Contingency Plan.
4. Knowledge of Waste Analysis Plan.
5. Knowledge in spill prevention.
6. Knowledge in sampling.
7. Knowledge of operation of fork lift, including passing a written exam.
8. Knowledge of all fire fighting equipment in area.
9. Be familiar with DOT and EPA regulations pertaining to Hazardous Waste.

III. Duties:

1. Inspect all incoming deliveries.
2. Assist in inventory control.
3. Make daily inspection for leakers, spills or other unsafe conditions.
4. Keep area in clean condition.
5. Provide samples to lab of all incoming materials.
6. Load and unload trucks.
7. Sample all materials.
8. Responsible for all incoming shipments meeting EPA and DOT regulations before unloading.

TRUCK DRIVER

I. Qualifications:

1. Education: High School Graduate or equivalent.
2. Experience: \*2 years minimum in the type of equipment to be used.
3. Possession of a valid Class I Drivers License.

II. Requirements:

1. Must complete company training program in the following areas:
  - A. Emergency Contingency Plans.
  - B. Knowledge of Waste Management Procedure.
  - C. Familiarization of hazardous waste.
  - D. Familiarization of safety and transportation of all types of products shipped by the company.
  - E. DOT and EPA rules and regulations.
  - F. Spill prevention and procedures while transporting materials.
  - G. Maintenance of equipment.
  - H. Safety inspection of trucks.
2. Complete a physical from a company doctor.
3. Pass check-out by company insurance company including tickets and accidents.
4. Pass driving test.

III. Duties:

1. Responsible for correctly picking up waste solvents from customers.
  - A. Manifest must be completely and correctly filled out by the customer.
  - B. Check for leakers or unacceptable containers.
  - C. Check to assure material is acceptable for recycling.
2. Delivery of clean solvents.
  - A. Check shipping papers to make sure correct.
  - B. Make sure truck is placarded correctly.
  - C. Check for leakers.
  - D. Pull samples for laboratory approval on bulk shipments and receive laboratory approval before departing plant.
3. Perform daily inspection on truck and fill out appropriate logs.
4. Assist customer in anyway to insure safety and compliance with all regulations.



WAREHOUSE PERSONNEL

I. Qualifications:

1. Education: High School Graduate or equivalent.
2. Experience: 1 year experience or equivalent.

II. Requirements:

Must complete company training program in the following areas:

1. Emergency Contingency Plans.
2. Knowledge of all fire fighting equipment and proper usage of the same.
3. Must be familiar with DOT and EPA regulations including labeling.
4. Must be familiar with material safety data sheets for all products.
5. Must be familiar with type of containers as per DOT and EPA regulations.
6. Knowledge in operation of fork lift including passing a written exam.

III. Duties:

1. Load and unload trucks.
2. Perform daily inspection of the warehouse area.
3. Responsible for safety and maintenance of equipment in warehouse area including:
  - A. Fire fighting equipment.
  - B. Fork lift.
  - C. Emergency spill equipment.
4. Responsible for all carriers including ECCD and outside carriers to be certain they are complying with DOT regulations including placarding.
5. Perform monthly and annual inventory of all products.
6. Assist laboratory with samples for quality control.
7. Assure the warehouse is kept clean and picked up at all times.

STILL OPERATOR

I. Qualifications:

1. Education: \*2 years college or equivalent.
2. Experience: \*1 year as yardman or equivalent.

II. Requirements:

1. Completion of company training program.
2. Knowledge of equipment including:
  - A. Stills.
  - B. Film Evaporators.
  - C. Cooling Tower.
  - D. Boilers.
  - E. Pumps and Motors.
3. Knowledge of products including material safety data sheets.
4. Knowledge of Emergency Contingency Plan.
5. Knowledge of Spill and Preparedness Plan.

III. Duties:

1. Keep area clean and safe.
2. Perform daily inspection of all equipment for leaks, spills or unsafe conditions.
3. Maintenance of equipment.
4. Operate stills as scheduled by Shift Foreman or Production Manager.

YARDWORKER

I. Qualifications:

1. Education: \*High School Graduate or equivalent.
2. Experience: None

II. Requirements:

1. Completion of company training program.
2. Knowledge of products including material safety data sheets.
3. Knowledge of Emergency Contingency Plan.
4. Wear proper equipment including steel toed shoes, safety glasses, protective clothing, etc.

III. Duties:

1. Assist still operators.
2. Pump materials from tanks to tank and drums to tank.
3. Assist in unloading and loading trucks.
4. Keep area clean and safe.

## SUBPART C

### PREPAREDNESS AND PREVENTION

265.31 The facility will be maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

#### 265.32 Required Equipment

The facility will maintain equipment required to minimize the possible occurrence of the above mentioned situations.

Alarm systems, safety protection equipment, fire fighting equipment, security locks, warning signs, decontamination equipment, and facility communication devices will be incorporated for this operation. Facility communication will include inter-office, external, and access to beepers telephone and/or intercom system. The alarm system will be an audible one heard and available throughout the premise. Fire fighting equipment will include an automatic sprinkler system, portable fire extinguishers (foam), fire hoses, a fork truck, and non-sparking shovels. Safety equipment will include self-contained breathing apparatus (e.g., constant-flow airline respirators with portable oxygen kits), protective clothing including hard hats, gloves, boots, and coveralls. In addition to this, first aid kits, gas detection equipment, safety glasses, and emergency eye wash stations and one shower station will be available. Spill control and clean up equipment will consist of a vacuum and/or positive pumps - capable of cleaning up any spilled liquids. Absorbent materials - Quik-Dri and vermiculite will be used for spill control. Non-sparking tools will also be used to avoid fire hazard when cleaning up a spill. Warning signs reading Danger, Unauthorized Personnel Keep out, will be posted on every entrance of the facility.

#### 265.33 Testing and Maintenance of Equipment

The facility communication systems, fire protection equipment, and decontamination (spill) equipment will be tested and maintained on a scheduled basis to assure its proper operation in time of emergency. A detailed description of the testing and maintenance of this equipment can be found in Subpart D Contingency Plan and Emergency Procedures.

265.34 Access to Communications or Alarm System

In this facility there are two locations in which hazardous waste is stored; one location in which treatment is processed, and one location for storage of treated wastes prior to shipment. All locations are adequately equipped with an emergency communication system and/or internal alarm device. All locations are within a single enclosed building.

A. Drum Storage Areas

Function: Storage of containers (55 gal.) of hazardous waste (spent solvent). These containers are unloaded from trucks and handled by forklifts (especially equipped for drum handling).

Device: An internal alarm system is located at each drum storage area.

B. Storage Tank Area

Function: Hazardous waste (spent solvent) is stored in two tanks (2,500 gal. ea.) prior to transportation to a recycler. Hazardous waste is loaded or unloaded from these tanks by positive pumps or vacuum trucks.

Device: One explosion proof phone system is located twenty feet from tank storage area.

265.35 Required Aisle Space

At this facility, we will maintain aisle space to allow the unobstructed movement of personnel with fire protection equipment to any area of the facility in an emergency.

The drum storage areas are the only locations where hazardous waste will be stored in containers. Main aisles will be at least eight feet wide and side aisles at least four feet wide. No containers will be stored more than twelve feet from an aisle.

Special Handling for Ignitable or Reactive Waste

A description of precautions to prevent accidental ignition or reaction of ignitable, reactive or incompatible waste can be found in the section titled "General Requirements for ignitable, reactive or incompatible wastes Subpart B paragraph 265.17".

265.37 Arrangements with Local Authorities

The following are the local authorities to be contacted and/or informed in case of emergency: Bensalem Township

Fire Department, Bensalem Township Police Department,  
Hospital,  
Ambulance service, Department of Transportation, Environ-  
mental Protection Agency, Pennsylvania Department of  
Environmental Resources, Pennsylvania Department of Health,  
Bucks County Department of Health, and Chemtrec Emergency  
Response Number.

## SUBPART D

### CONTINGENCY PLAN AND EMERGENCY PROCEDURES

#### 265.50 Applicability

The contingency Plan and Emergency Procedures are presented herewith, as specified by 40 CFR 265.50 to 265.56. The format is essentially based on information and guidance published in "Guidelines for the Development and Implementation," published by the Bureau of Solid Waste Management, Pennsylvania Department of Environmental Resources, Harrisburg, PA.

This document reflects operations at East Coast Chemical Disposal, Incorporated, Levittown, Bucks County, as of date of permit approval.

Upon review and approval of this PLAN by the AGENCY, bound copies of the final document will be maintained at East Coast Chemical Disposal, Inc. in the Levittown Office. Revisions as necessary, will be periodically submitted to the AGENCY and will be included to update the plan. Copies will be given to all local agencies, including medical, fire, police and Township.

#### 265.51 Purpose and Implementation of Contingency Plan

The purpose of the Contingency Plan presented herewith is to minimize the hazards to human health and the environment associated with fires, explosions or an unplanned release of hazardous material to the air, soil or surface water.

Any fire, medical emergency or chemical spill at the ECCD, Inc. facility will be addressed in the enclosed plan, as required by 40CFR 265.50 - 265.56. In all cases, however, responsibility for emergency procedures remains with the Emergency Coordinator, as outlined in 40CFR 265.56.

#### 265.52 Content of Contingency Plan

The Contingency Plan consists essentially of three (3) distinct sections, based on the type of emergency occurrence. The three types are:

- Section A: Fire emergencies.
- Section B: Medical emergencies.
- Section C: Chemical spills.

#### Section A: Fire Emergencies

##### I Personnel Responsibilities

##### A. Emergency Response Team (ERT)

East Coast Chemical Disposal, Inc. will have a designated team of individuals who will respond to any

fire situation that exists at the facility. Each member of the ERT has a specific responsibility, one which they have been trained to perform in addition to the aspects of fighting both regular and chemical fires.

The ERT is under the direct supervision of the ECCD fire chief (shift foreman on duty). When local fire company arrives at the facility, the ERT will transfer control and responsibility to the fire company. At this point, the ERT is available to assist as necessary. The ECCD fire chief will remain with the Fire Captain and will provide any advise or assistance as necessary.

The immediate objective of the ERT is to attempt to control a fire as soon as it is detected. This immediate response will often result in the fire being contained or extinguished. It must be made very clear, however, that unnecessary risks will NOT be taken in an attempt to contain or control a fire.

Specific responsibilities of the Emergency Response Team

1. ECCD Fire Chief
  - a. Makes certain local fire company and emergency coordinator are contacted.
  - b. Assesses condition of fire and directs ERT to prevent spreading to potentially hazardous areas.
  - c. Makes certain all processing operations are terminated.
  - d. Makes certain all facility personnel have been notified of a fire condition and that facility evacuation procedures have commenced.
  - e. Directs all fire-fighting techniques until arrival of local fire company.
  - f. Works in conjunction with Emergency Coordinator to assess potential hazards to human health or the environment that may result directly or indirectly from the fire (generation of any toxics, irritating or asphyxiating fumes, heat induced explosions, etc.).
  - g. Reviews periodically the roster of the ERT, specifically related to knowledge and understanding of the function of each of the team members.



- h. Evaluates fire-fighting equipment on regular basis and makes sure that all inoperative equipment is either repaired or replaced.
- 2. Notification person
  - a. Notifies local fire company by phone that a fire situation exists. This will include
    - (1) Company name.
    - (2) Company address.
    - (3) Employee name.
    - (4) Any fire related information, if available, such as extent of involvement, injuries and material burning.
  - b. Notifies all plant personnel via plant-wide intercom system that a fire condition exists and that facility evacuation procedures will commence.
  - c. Notifies Emergency Coordinator by phone or by remote page-beeper.
- 3. Nozzleman
  - a. Operates the hose nozzle of the fire-hose system.
  - b. Upon direction of the ECCD fire chief, directs the stream from the fire hose in the appropriate manner so as to prevent the fire from spreading.
- 4. Fork truck driver
  - a. Upon direction of the ECCD fire chief, operates the company fork truck to remove or isolate any containers in close proximity to the fire.
- 5. Truck driver
  - a. Removes all company trucks away from fire area, so as not to block or hinder the entrance of the local fire company to the fire scene.
- B. Manager/Foreman Responsibilities
  - 1. Must evacuate department when alarm sounds or announcement is made over the intercom.
  - 2. Is last person to leave assigned area after checking all areas that alarm may not have been heard.
  - 3. Ensures that all operating equipment is shut down, which if left running would create a hazard.
  - 4. Makes a "head-count" for department, notifying ECCD fire chief if anyone is unaccounted for.

- C. All Employees (except ERT members)  
All employees will follow the following EVACUATION RULES
1. Evacuate building when alarm sounds.
  2. Do not block fire lanes.
  3. Do not wait for friends.
  4. Do not be casual.
  5. Do not panic.
  6. Do not light up a cigarette.
  7. Follow specific assigned evacuation routes.
  8. After leaving building, move to designated assembly location.
  9. Report to your supervisor at your designated assembly location regardless of which exit is used.
  10. Do not return to building or leave designated assembly location until specific instructions have been given to you.
- D. All Visitors
1. All visitors are "logged in" at reception desk, indicating who the visitor is seeing.
  2. Receptionist will notify supervisor if a visitor is on property at the time of the emergency and whom the visitor is with.
  3. Supervisor determines whereabouts of visitor and ensures that the visitor is accounted for and is included in evacuation plan.

## II Evacuation Procedures

- A. The signal for premises evacuation is the fire alarm or an announcement made on the P/A system.
- B. When fire alarm sounds or fire announcement is made, all employees and visitors MUST evacuate premises.  
Note: Exceptions to the evacuation will be members of the ERT and designated personnel certified in CPR.
- C. Evacuation areas.
1. All locations have been chosen so they are at a distance greater than 200 feet from building.
  2. Every supervisor will designate an assembly area where all department employees will assemble.
- D. Fire drills will be conducted monthly on a surprise basis, and will be treated as real emergency situations.

## Section B: Medical Emergencies

Three (3) types of medical emergencies will be addressed in this Plan, as follows:

1. Job-related injury/accident - first aid treatable.
2. Job-related injury/accident - requiring immediate emergency treatment at local hospital.
3. Health-related emergencies such as epileptic seizures, heart attacks, etc.

## I Personnel Responsibilities

### A. Manager/Foreman Responsibilities

1. Must evaluate medical emergency to determine, if possible, the seriousness of the situation or the extent of injuries.
2. Will direct certified personnel as required to administer CPR or first aid.
3. Ensures that proper authorities are notified; e.g., ambulance, hospital emergency room, on-call physician, etc.
4. Ensures that any operating equipment causing the incident is secured.
5. Ensures that injured personnel are kept quiet and as comfortable as possible.
6. Completes accident investigation report to be submitted to the ERC for subsequent critique and review with the idea of remedying any unsafe situations which may have caused the accident.

### B. Notification Person

Notifies all emergency services by telephone.

### C. Certified CPR/First Aider - one assigned to each working shift.

Administers CPR and/or first aid to injured personnel as necessary.

### D. All Employees

All employees will follow the following rules in the event of any injury or health emergency involving a fellow worker.

1. Do NOT move person.
2. Contact supervisor immediately.
3. Do not leave person until Supervisor/First Aider arrives.
4. Return to your work station at this time.

## Section C: Chemical Spills

### I Personnel Responsibilities

#### A. Emergency Coordinator and ERT

1. For details relating to duties of the Emergency Coordinator, see section 265.55, found below.
2. Emergency Response Team  
East Coast Chemical Disposal, Inc. will utilize the same Emergency Response Team (ERT), as described above in Section A - Fire Emergencies, to handle chemical spills.  
In the case of a chemical spill, however, the ERT is under the direct supervision of the Emergency Coordinator.  
In the case of a chemical spill, the immediate objective is to contain the spill and to isolate the source of the spill.

#### B. Supervisors/Managers

1. Maintains updated inventory of all chemicals and waste materials on hand.
2. Ensures that all containers are properly labeled.
3. Maintains a processing manual covering treatment and spill cleanup procedures for all chemicals and waste materials stored in area of responsibility.
4. Provides the appropriate protective clothing and safety equipment to employees and enforces proper usage while chemicals and/or wastes are being handled.
5. Trains employees in chemical safety.
6. Enforces all safety procedures, without exception.

#### C. All Employees

1. Will follow all safety procedures at all times.
2. Will wear appropriate protective clothing and safety equipment as required by foreman.
3. Must become familiar with all processing guidelines and usage of chemicals in assigned department.
4. Must report chemical spills to supervisor/foreman at once.

### II Chemical Spill Procedure - this procedure is under direction of shift foreman or by E/C.

- A. All persons contacted by a chemical or a solvent MUST wash off with water and change clothing. Minimum washing time is 15 minutes for contacts above the neck. Five minutes washing is usually suffi-

cient for all other parts of the body. Additional cleanup will be at discretion of foreman.

- B. E/C and the ERT will be notified in case of a spill. The E/C will be contacted by phone or remote page-beeper if not at facility.
- C. All other plant personnel will be notified if large spill occurs or if their protection or safety is necessary.
- D. The E/C and ERT will proceed to the spill location and will determine:
  - 1. Product involved in the spill.
  - 2. If spill resulted from leak, attempt to stop leak and contain spill.
  - 3. If facility evacuation is necessary.
  - 4. If notification of appropriate outside agencies is required.
- E. If spill is determined to be flammable, all ignition sources within 50 feet of spill will be removed by ERT.
- F. Spill will be cleaned up using all available equipment including special vacuum trucks, earth-moving equipment, "MUD HOG" pumps, "KWIK-DRI", vermiculite, etc.
- G. All equipment contacting the spill will be decontaminated and will be reorganized for future use by the ERT after area has been secured.
- H. Appropriate agencies will be notified, as necessary, of the incident and the progress of the cleanup effort.

#### 265.53 Copies of Contingency Plan

East Coast Chemical Disposal, Inc. will provide copies of the Contingency Plan for distribution, as follows:

- Original - Administrator's office
- One Copy - shift foreman's office
- One Copy - US EPA Region III office
- One Copy - Pennsylvania DER - Norristown office
- One Copy - local fire company
- One Copy - local police department
- One Copy - local township officials

#### 265.54 Amendment of the Contingency Plan

The Contingency Plan will be reviewed periodically and will

be amended as necessary. Distribution of the ammended plan will be as per 265.53, above.

## 265.55 Emergency Coordinator

### I Designation of Emergency Coordinator

East Coast Chemical Disposal, Inc. has designated:

_____	Office
_____	Home
_____	Page-beeper

Other persons qualified to act as the Emergency Coordinator are:

_____	Office
_____	Home
_____	Page-beeper
_____	Office
_____	Home
_____	Page-beeper

### II Responsibilities of Emergency Coordinator

The E/C shall comply with the requirements of 40CFR 265.56 whenever an imminent or actual emergency arises. In addition, the E/C shall follow these guidelines.

- A. E/C or his designee will activate the alarm system to notify all facility personnel of an emergency situation.
- B. E/C or his designee will notify all required authorities (See Appendix 1 for list).
- C. E/C will determine the extent of the problem.
- D. E/C directs efforts of the ERT.
- E. E/C will evaluate need for containment.
- F. E/C will evaluate need for evacuation and/or shut-down.
- G. E/C will institute follow-up procedures in event of an accident.

## 265.56 Emergency Procedures

### I Spill Cleanup

Chemical spills will be cleaned up as quickly as possible after the incident. The E/C will direct all cleanup operations, whether by use of absorbents or vacuum truck. All cleanups will be conducted in accordance with all federal, state and local regulations. All cleanup personnel will be required to use the proper protective clothing and equipment during cleanup operations.

- A. Procedure for Organic Solvent Spills (includes halogenated solvents)
  1. Soak up small spills with Quik-Dri or vermiculite.
  2. Wear protective equipment including, but not

limited to, rubber gloves and boots, protective suits and organic vapor respirators.

3. Do not enter confined areas without SELF-CONTAINED BREATHING APPARATUS.
4. Spent or used absorbant will be shovelled into approved 17E/17H open-head drums for subsequent disposal per state and federal regulations.

B. Procedure for Acid Spills

1. All acid spills will be neutralized with bagged lime or soda ash.
2. Same procedures as A above will apply, as regards protective equipment, entering confined areas and spent absorbants.

C. Spills occuring outside diked areas.

All chemical processing and storage areas at ECCD, Inc. have been designed with spill-containment in mind. Dikes or small beams will be placed around each storage or processing area. If, however, the dikes cannot, for some reason, contain the spill, or if the spill occurs outside the diked area, the following will be operative.

1. New earthen dikes will be made with earth moving equipment in an attempt to contain spill.
2. Dry absorbant will be spread.
3. Trenching to direct spill flow to a temporary holding pond.
4. Utilize vacuum tanker or "MUD HOG" pump to remove impounded spill.

II Emergency Equipment

ECCD, Inc. utilizes emergency equipment that complies with 40CFR 264.32. These requirements will, of course, be exceeded when deemed necessary by the E/C or the ERT.

A. Telephone system - will consist of

1. Inter-office communications.
2. External communication.
3. Access to page-beepers.

B. Alarm system - the building is a 12,000 square foot structure and will have an audible alarm system that will be activated by the fire sprinkler system or when the manual fire alarm is activated. The activation of the alarm will also notify the Bensalem Township Fire Department of a fire situation.

C. Spill Control and Clean-up Equipment

1. Vacuum truck - capable of pumping up any spilled liquids.

2. Absorbant materials - Quik-Dri and Vermiculite will be used for spill control.
3. Non-sparking tools - shovels, picks, etc.
4. Maintenance hand tools.
5. Positive Pumps.

D. Fire Protection Equipment

1. Automatic sprinkler system.
2. Portable fire extinguishers using foam or dry chemicals.
3. Fire hoses (water with chemical additives).
4. Fork truck.
5. Non-sparking shovels.

E. Safety Protection Equipment

1. Self contained breathing apparatus.
2. Organic vapor chemical respirators.
3. Protective clothing.
4. First aid kits and Por-T-Pak portable oxygen units.
5. Emergency eye wash and shower stations.

III Testing and Maintenance of Emergency Equipment

- A. ECCD will inspect on regular basis all facility communication and alarm systems, spill control, fire protection and safety protection equipment.
- B. Much of the emergency equipment is in daily use and, accordingly, is inspected on a daily basis. These items include:
  1. Fork truck.
  2. Vacuum truck.
  3. Telephone system.
  4. Hand tools.
- C. Equipment not in daily use will be inspected either on weekly or monthly basis. All first aid kits will be maintained and inspected by Zee Medical Services, a supplier of first aid necessities.
- D. All inspections will be recorded on the appropriate equipment checklists for review by the E/C on a monthly basis.
- E. All inspection checklists will be filed for easy access and will be kept at the ECCD, Inc. facility for a minimum of three years.



## APPENDIX I

## Emergency Coordinator

\_\_\_\_\_  
 \_\_\_\_\_ Office: \_\_\_\_\_  
 \_\_\_\_\_ Home: \_\_\_\_\_  
 \_\_\_\_\_ Page-beeper: \_\_\_\_\_

## Other qualified acting Emergency Coordinators.

\_\_\_\_\_  
 \_\_\_\_\_ Office: \_\_\_\_\_  
 \_\_\_\_\_ Home: \_\_\_\_\_  
 \_\_\_\_\_ Page-beeper: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_ Office: \_\_\_\_\_  
 \_\_\_\_\_ Home: \_\_\_\_\_  
 \_\_\_\_\_ Page-beeper: \_\_\_\_\_

## Other important numbers, ECCD, Inc. personnel.

Name: \_\_\_\_\_ Office: \_\_\_\_\_  
 Title: \_\_\_\_\_ Home: \_\_\_\_\_

Name: \_\_\_\_\_ Office: \_\_\_\_\_  
 Title: \_\_\_\_\_ Home: \_\_\_\_\_

Name: \_\_\_\_\_ Office: \_\_\_\_\_  
 Title: \_\_\_\_\_ Home: \_\_\_\_\_

Edgely Fire Company & Ambulance/Rescue  
Services

Bristol Township Police

Bucks County Emergency

Dept. of Transportation (Commonwealth) (DOT)

Environmental Protection Agency (EPA)

PA Dept. of Environmental Resources (DER)

PA Dept. of Health

Bucks County Health Department

Chemtrec Emergency Response Number

215/943-1200

215/949-2000

215/547-5222

717/787-7445

215/597-9800

717/787-4526

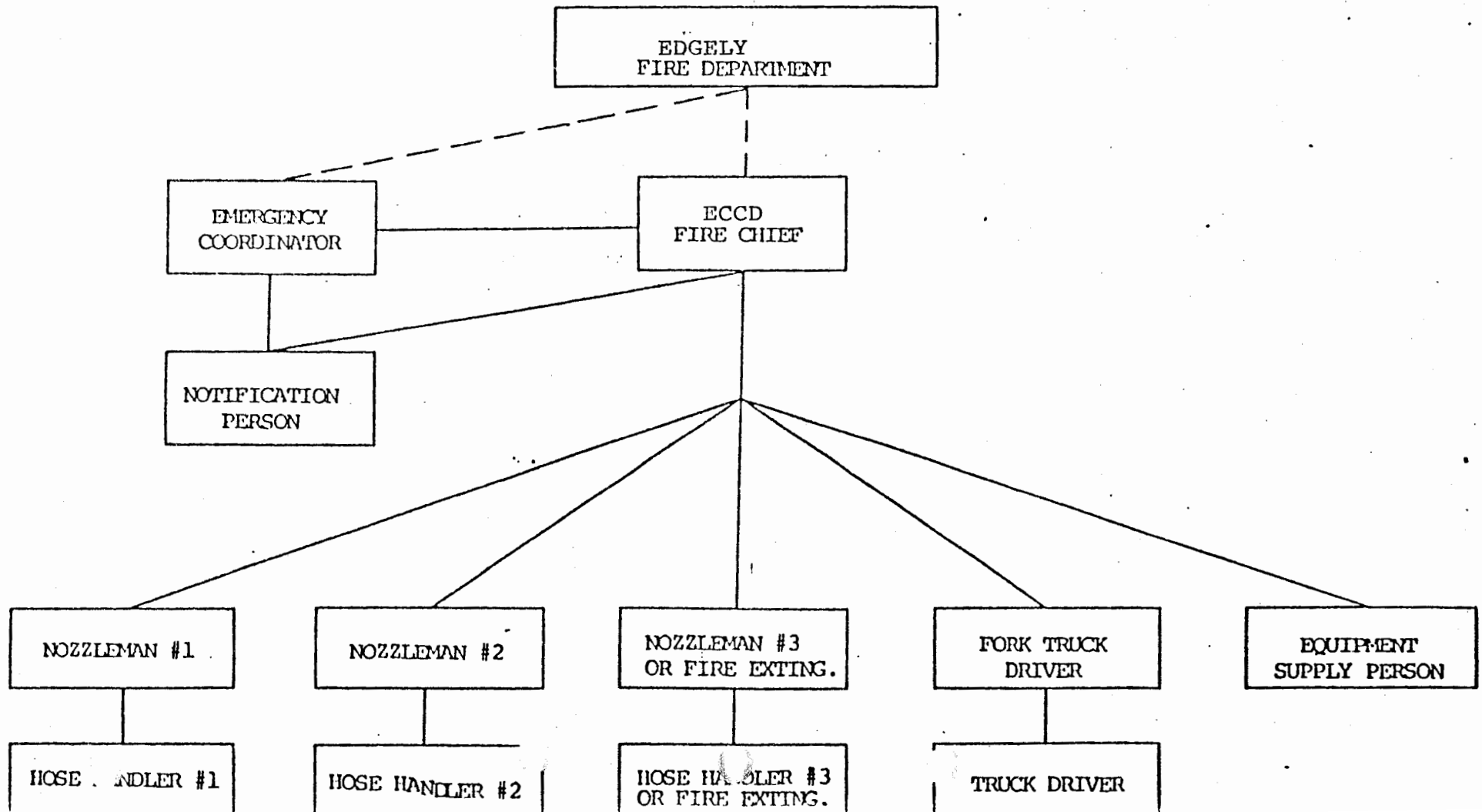
717/787/6436

215/343-2800

800/424-9300

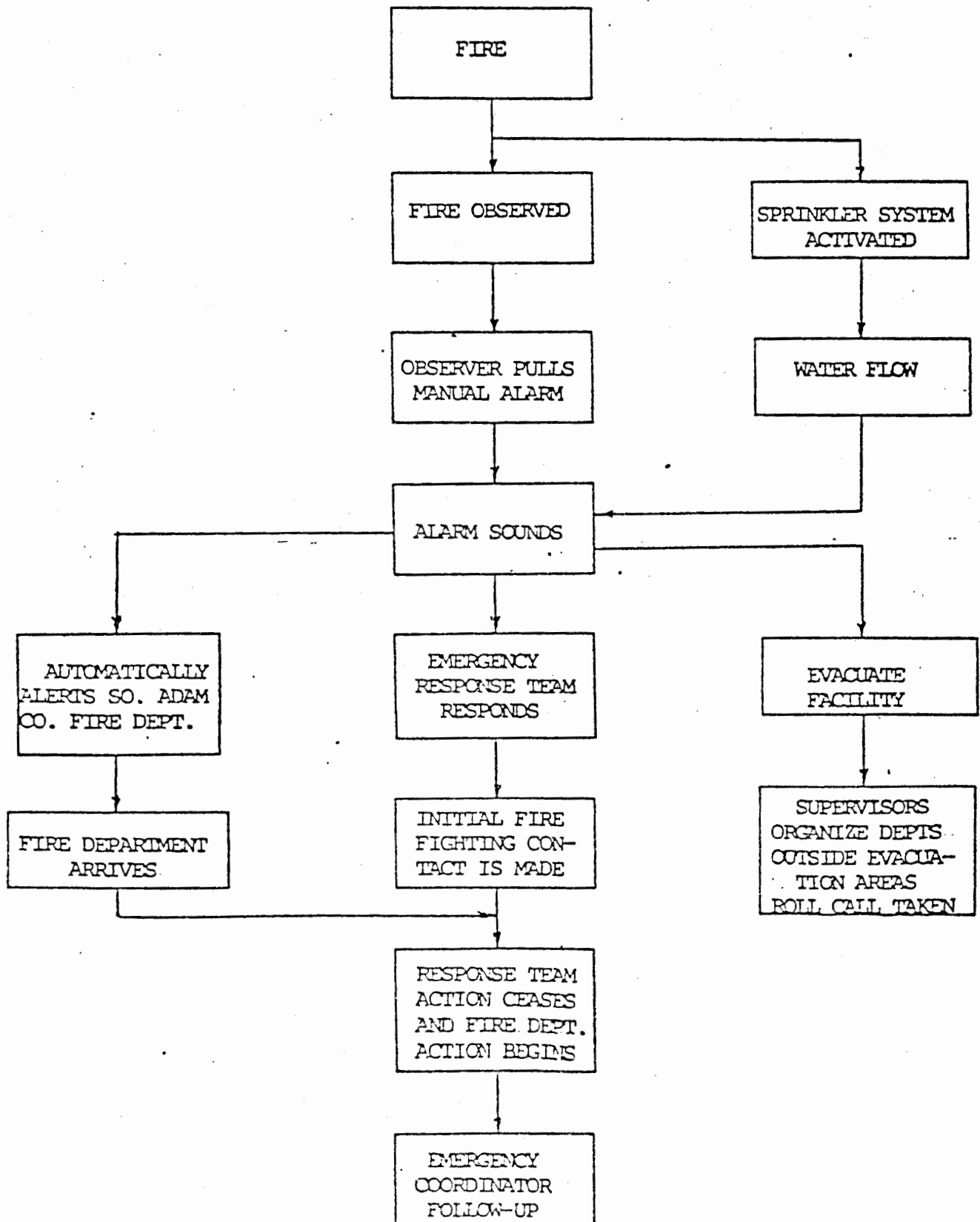
EAST COAST CHEMICAL DISPOSAL, INC.

EMERGENCY RESPONSE TEAM



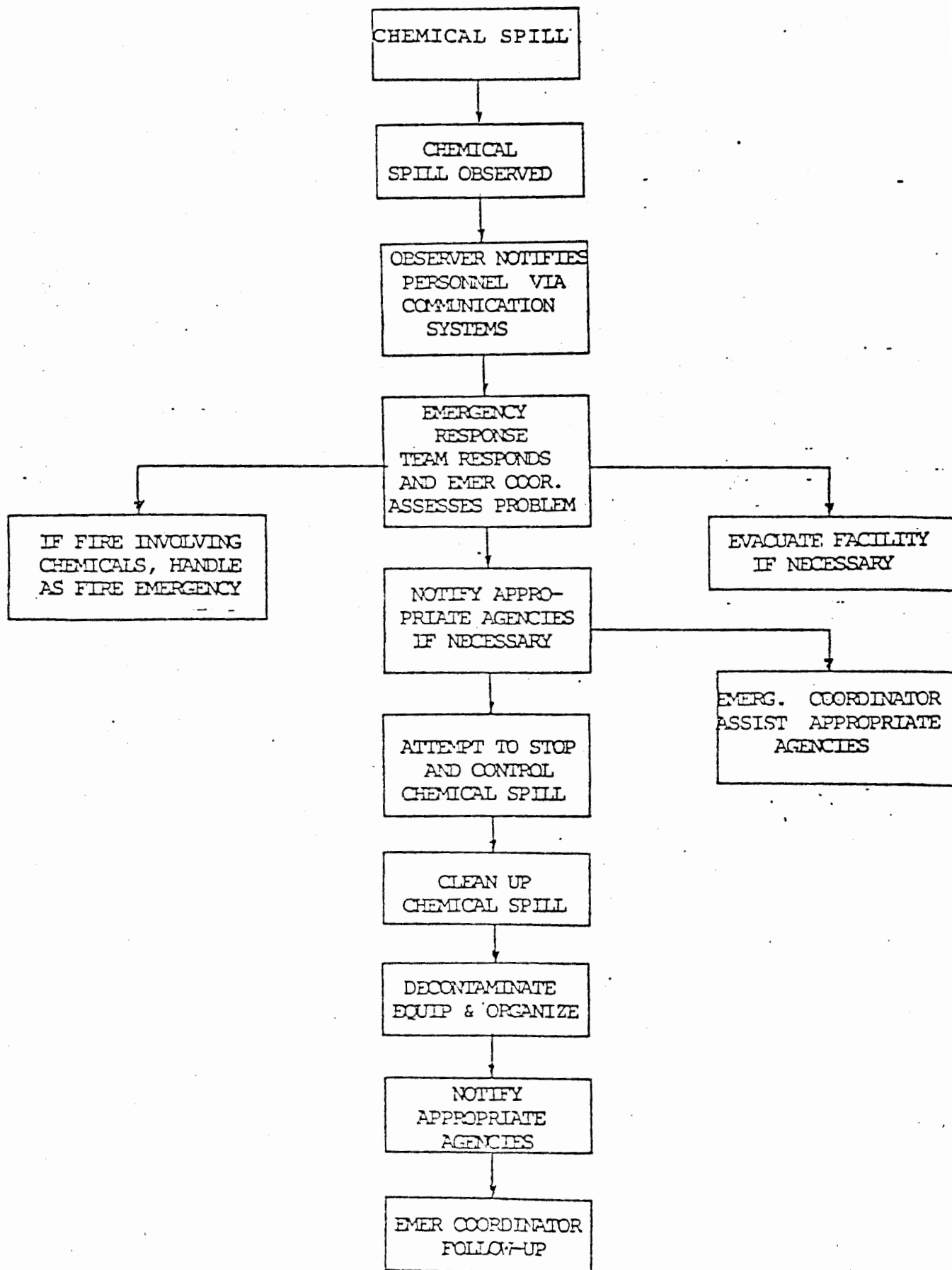
# EMERGENCY FIRE PROCEDURES

## SECTION 1



# CHEMICAL EMERGENCY PROCEDURES

## SECTION 2



## DO's and DON'T's of CHEMICAL SPILLS

### DON'T's

- \* Never try to determine what the chemical spill is by tasting or sniffing.
- \* Do not add water to spills. This only spreads the problem and it might splatter.
- \* Do not attempt to neutralize a spill without proper personal protective equipment.
- \* Do not handle even "neutralized" chemicals with bare hands.
- \* Do not leave chemical spills unattended.
- \* Do not walk in-chemical spills.

### DO's

- \* Know your chemicals and processes and label all chemicals so that there are minimum "unknown" spills.
- \* Use pH strips to determine pH.
- \* Call someone who would know what it is.
- \* Use appropriate chemical spill neutralizer.
- \* If chemicals should get on you during a spill, take care of yourself first.
- \* Even if you do know how to clean the spill yourself, call for help.
- \* Eliminate all sources of ignition around flammable solvent spills.

EMERGENCY EQUIPMENT LIST (WEEKLY)

[illegible]

# EMERGENCY EQUIPMENT CHECKLIST (MONTHLY)

FIRE HOSE CONDITION			LEVEL IN ATC TANK	PORTABLE FIRE EXTINGUISHERS		SELF CONTAINED BREATHING APPARATUS			INSPECTED BY	DATE
HOSE #1	HOSE #2	HOSE #3		QUANTITY	COMMENTS	WEAR/ CRACKS	ALARM FUNCTION	PRESSURE		
PORT-T-PAKS			ORGANIC VAPOR RESPIRATORS			EYE WASH STATIONS OPERATIONAL		EMERGENCY SHOWER OPERATIONAL	COMMENTS	
QUANTITY	PRESSURE	QUANTITY	CRACKS	REPLACEMENT CARTRIDGES						

# Key

- |                                |                                    |
|--------------------------------|------------------------------------|
| 1 Laboratory                   | 6 Receiving - Materials + Supplies |
| 2 Office                       | 7 Receiving                        |
| 3 Container Storage            | 8 Shipping                         |
| 4 Materials - Tools - Supplies | x — x Fence                        |
| 5 Processing Area              |                                    |

Scale 1" = 400"

## EVACUATION PLAN

Property Line

325'

